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UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK
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UNITED STATES OF AMERICA,

             v.   14 Cr. 68 (KBF)

ROSS WILLIAM ULBRICHT,

                 Defendant.

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                                       New York, N.Y.
                                       January 29, 2015
                                       9:10 a.m.

Before:

                HON. KATHERINE B. FORREST,

                                       District Judge

                        APPEARANCES

PREET BHARARA,
     United States Attorney for the
     Southern District of New York
BY: SERRIN A. TURNER
     TIMOTHY HOWARD
          Assistant United States Attorneys

JOSHUA LEWIS DRATEL
LINDSAY LEWIS
JOSHUA HOROWITZ
     Attorneys for Defendant

          – also present –

Special Agent Vincent D'Agostino
Molly Rosen, Government Paralegal
Nicholas Evert, Government Paralegal

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1   (In open court; jury not present)

2   THE DEPUTY CLERK: This is the continuation of the

3   matter now on trial. The United States of America v. Ross

4   William Ulbricht, 14 Cr. 68. Counsel, state your names for the

5   record.

6   MR. TURNER: Good morning, we're down to our skeleton

7   crew, Serrin Turner and Timothy Howard for the government and

8   Molly Rosen, paralegal.

9   THE COURT: Good morning.

10   MR. DRATEL: Joshua Dratel for Mr. Ulbricht who is

11   standing beside me. Joshua Horowitz is here as well. Lindsay

12   Lewis from my office is on her way.

13   THE COURT: Thank you. Good morning to all of you.

14   MR. DRATEL: Good morning.

15   THE COURT: My intention was to proceed through the

16   jury instructions and to pick up where we left off, unless you

17   folks had other things that you would like to deal with first.

18   Are there any housekeeping matters or other matters that we

19   should deal with right now before we start?

20   MR. DRATEL: No, your Honor.

21   THE COURT: Mr. Turner.

22   MR. TURNER: No, your Honor. Thank you.

23   THE COURT: Thank you. We are in the jury

24   instructions. We're working from the same version as

25   yesterday, which is that which you folks have provided to the

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 1   Court, and we are on objects of the conspiracy, page 54. The

 2   single-versus-multiple-conspiracy issue is one that I think we

 3   briefed. I think that, unless anybody has anything else they'd

 4   like to say in addition to what has been said, I'll go through

 5   everything carefully and make a determination as to whether we

 6   should have a single versus multiple charge. If there are

 7   additional points you'd like to make, go ahead.

 8   MR. DRATEL: We would like to do research and perhaps

 9   have a letter perhaps by mid-day tomorrow perhaps.

10   THE COURT: I will then hold off on going through

11   that. It's something that I need to give thought to, so having

12   your letter would be very helpful.

13   MR. DRATEL: Okay. Thank you.

14   THE COURT: So that's the changes for 52 and 53.

15   That's pages 52 and 53, so we'll hold on those. In terms of

16   the objects of the conspiracy, on page 54, there are two

17   changes, one of which doesn't appear to be objected to. That's

18   the insertion of the "beyond a reasonable doubt" language which

19   is fine with me.

20   MR. TURNER: No objection.

21   THE COURT: I take it that was then a defense point,

22   so we'll accept that.

23   MR. DRATEL: Yes.

24   THE COURT: The other point was the deletion of "or to

25   aid and abet such activity," and this appears in several

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1   places. I wanted to find out from Mr. Dratel the basis of the

2   deletion.

3   MR. DRATEL: I don't think you can aid and abet a

4   conspiracy. Aiding and abetting is the complete -- and while a

5   conspiracy is completed upon agreement, that's different than

6   completing a substantive offense, so I don't see any basis for

7   aiding and abetting a conspiracy. That's a multilevel inchoate

8   crime, which I think is a due process violation.

9   THE COURT: I was just reading, and I think it's a

10   Judge Oakes case, Second Circuit in the 80's, it could be the

11   *Perry* case -- but I'm not sure if that's the right case I have

12   written down here, actually, I have it in my robing room, I

13   have the pink highlighter on it -- where this exact issue was

14   debated. And Oakes writes the decision for the panel. The

15   panel believes that there is a crime of aiding and abetting a

16   conspiracy. He suggests that he would have reached the same

17   result on a different basis. So it's sort of a funny opinion

18   in some ways because it says my colleagues, my colleagues, my

19   colleagues in the majority opinion as opposed to what sounds

20   almost like a dissent. And that opinion I believe has been

21   cited again, and that's the *Orozco-Prada* case, which does

22   suggest that this kind of crime exists. I looked that issue

23   because I, like you, didn't know how you would aid and abet

24   something that itself is a conspiracy, but it does appear to be

25   something which the Second Circuit has addressed.

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1   Have you found any cases, Mr. Dratel, which have said

2   that it's not a crime?

3   MR. TURNER: Can I clarify for the record, the charge

4   is conspiracy to aid and abet, not to aid and abet a

5   conspiracy.

6   THE COURT: I'm sorry. Correct. Conspiracy to aid

7   and abet. My mistake flows from the fact that I find this a

8   somewhat confusing concept.

9   MR. DRATEL: That, I don't think you can have a

10   conspiracy to aid and abet either because the conspiracy to

11   commit is to the unlawful act, not to aid and abet an unlawful

12   act, and there are cases on that. I don't have them. Maybe

13   we'll put that all in our letter tomorrow, your Honor, okay?

14   We'll include that.

15   THE COURT: Actually, it is the *U.S. v. Perry* case.

16   If you've got anything, Mr. Dratel, that suggests that *U.S. v.*

17   *Perry* and that line is not good law, I would need to see that;

18   otherwise, I would be bound to follow Second Circuit law.

19   MR. DRATEL: I understand.

20   THE COURT: It's 643 F.2d 18, and that was the case

21   that I was referring to.

22   MR. DRATEL: Thank you. Can we address that in our

23   letter tomorrow?

24   THE COURT: Yes.

25   Is there anything that you wanted to say further on

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1   that topic, Mr. Turner, other than what's laid in and out your

2   papers?

3   MR. TURNER: On that topic, yes. This has already

4   been briefed. It was in the motions to dismiss. This is the

5   charge in the indictment. It specifically alleges conspiracy

6   to aid and abet. The indictment has been upheld in response to

7   the motion to dismiss, and we're now entitled to present that

8   indictment to the jury. So as far as we're concerned, it's the

9   law of the case.

10   THE COURT: I hear your position. Let's go on to the

11   next change, which really starts on 57, and it's the inclusion

12   of additional language on participation in a conspiracy, and

13   it's that whole page, 57. I didn't know if this was agreed-to

14   language or not agreed-to language.

15   MR. TURNER: This is the government's proposal. I'm

16   not sure whether he agrees to it.

17   THE COURT: Defense.

18   MR. DRATEL: Our defense is not withdrawal, and on its

19   face, the instruction appears not to be objectionable; however,

20   I just want to go back and look to see if we want to add any

21   language.

22   THE COURT: The Court was fine with the language.

23   Page 58, extent of participation, the first change is

24   the insertion of "He need not have been a part of the

25   conspiracy when it ended." And I think that that is a correct

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1   statement of the law.

2   MR. DRATEL: Yes.

3   THE COURT: And I think it's a government change.

4   MR. TURNER: Yes, your Honor.

5   THE COURT: I don't have any problem with the

6   inclusion of "participated in" as opposed to "join" in that

7   first paragraph on page 58.

8   Mr. Dratel, do you have any problem with that?

9   MR. DRATEL: No.

10   THE COURT: The next change is also the similar one.

11 We'll just take both of those joining/participating changes.

12 The following one is "before or after he joined" in addition to

13 all that was done, and then the language that follows that and

14 then the other insertion.

15   MR. DRATEL: I know what the state of the law is, but

16 I'm just objecting to "before."

17   THE COURT: You're making a principled objection

18 recognizing the law is against you on that?

19   MR. DRATEL: Right.

20   MR. TURNER: Your Honor, this was actually my

21 language, but can we change "before or after he joined" to

22 "before or after he participated"? It's just a small concern

23 there. If he started the conspiracy, it's a little awkward to

24 say he joined, so if we can make it a little more open.

25   THE COURT: I think the effect of participation or

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1   joining is the same.

2   The next page, page 59, without reading it in, it's

3   the first full paragraph, I was fine with these changes. Does

4   anybody have a problem with them?

5   MR. TURNER: No. That was the government's change.

6   MR. DRATEL: Yes. It's the same concept.

7   THE COURT: So I'll take those. Then we are on page

8   64. There was a typo which was the first change. That's fine.

9   Deletion of the word "to." And then the inclusion of the word

10   specific.

11   MR. DRATEL: I'm sorry, page 60 --

12   THE COURT: Four. This is continuing criminal

13   enterprise charge, the CCE charge. So the inclusion of the

14   words "specific violations."

15   MR. TURNER: My only concern there, your Honor, is

16   that there's clear circuit law holding that a conspiracy can be

17   one of the predicate violations. So, if the idea here is that

18   it has to consist in, like, one specific act, I don't think

19   that's accurate. I think three or more violations says enough.

20   THE COURT: Well, let's take that as part of some of

21   the -- and this I think is the issue that we should spend the

22   rest of our time talking about this morning, perhaps -- which

23   is, the issues with respect to CCE more generally; and I think

24   that point fits into the extent to which the three or more

25   series of violations need to be laid out someplace.

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1   I think the law is clear that they need not be laid

2   out in the indictment. There have been some views expressed by

3   judges that perhaps they should be, but the law has developed

4   that indictments have passed muster without the violations

5   being specified. So, I believe under the law, that ship has

6   sailed. The question is whether or not they need to be spelled

7   out in the instructions or in closing or somewhere. And here,

8   the government does reference "these offenses include," but

9   violations I think are potentially broader than that.

10   Go ahead, Mr. Turner.

11   MR. TURNER: Sure. Your Honor, if it's permissible

12   for the indictment to just have this level of specificity which

13   is reflected in the instruction that it includes violations of

14   these various offenses, that's, again, the charge we're

15   entitled to present to the jury. There's no sort of sudden

16   bill of particulars that can be thrust on the government. I

17   think the language in some of the opinions when they talk about

18   specifying the offenses, all they're really talking about is

19   specifying offenses as reflected in something like page 66. I

20   haven't seen any law suggesting that the government is suddenly

21   required to choose three specific acts and argue only those

22   acts. The jury is free to select whatever acts they want to

23   from the evidence they have heard.

24   THE COURT: I want to separate analytically a couple

25   of things just to make sure that I understand exactly where the

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1   issues between the parties join.

2   One is listing the counts on page 66, Count One, Count

3   Two, Count Three and then another Count Three is listing

4   offenses. If the jury convicted the defendant on those counts,

5   they could certainly be predicate counts that would constitute

6   the continuing series. That's one issue.

7   There's a separate issue as to whether or not if the

8   defendant were to be acquitted on one or more of those counts,

9   whether or not there would be sufficient other violations in

10   whatever counts either he was convicted of or there need not be

11   convictions under the CCE case law for violations to be found.

12   In other words, you can have somebody who is acquitted

13   of a particular charge but found to have violated the narcotics

14   law in a continuing series, so without having a conviction on

15   that series. That seems to be clear.

16   So I need to understand if the government's position

17   is that they're only seeking to have the series be Counts One

18   Two, Three and Three, because Three is mentioned twice, or

19   whether it is that there are potentially numerous violations

20   embedded within any one of those counts.

21   MR. TURNER: It's the latter, your Honor. When we

22   reference the counts here, it's just that these offenses are

23   defined in discussing Count One, Count Two, Count Three. For

24   example, the last paragraph there, using a communication

25   facility in committing or in causing or facilitating violations

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1   of narcotics laws, that's not charged anywhere in a count.

2   It's one of the objects of Count Three, but it's not something

3   the jury is required to find. They can find that another

4   object was part of the conspiracy. But nonetheless, the point

5   is that that violation is defined in discussing Count Three.

6   So we could argue to the jury there have been numerous

7   electronic communications you've seen where we would argue the

8   defendant is using a communications facility in furtherance of

9   narcotics trafficking or of aiding and abetting narcotics

10   activity. The law is very clear that each time a

11   communications facility is used in that way, that is a separate

12   violation. So the jury can pick three of those and say --

13   THE COURT: I think the communication facility, agree

14   with you, there is a case on that. I don't think it's the most

15   clear of all of the CCE continuing series of violations.

16   There's been some criticism of using repeated phone calls all

17   in furtherance of the same object, but I don't disagree with

18   you that there is a case on that. Certainly I think there are

19   cases which say if you distributed drugs or participated in the

20   distribution of drugs on three or more occasions, that's

21   enough.

22   MR. TURNER: Right. We'll have thousands of

23   transactions that the defendant participated in to the extent

24   that he facilitated those transactions through the site, got a

25   commission through the site. Each one of those can be taken

1   separately.

2   THE COURT: So your position is that the government

3   does not need to anywhere lay out, for instance, on January 1,

4   2012, the following happened on December 1, the following

5   happened November 1, the following happened, etc.

6   MR. TURNER: Right. There's no need for us to specify

7   in advance "Here are the ones you are limited to finding." The

8   jury is free to look at the evidence and decide whether the

9   charge in the indictment has been proven.

10   THE COURT: Let me hear from Mr. Dratel as to the

11   basis for deleting these. And I've looked at the cases, by the

12   way, that you folks have cited in your original pieces.

13   Go ahead, Mr. Dratel.

14   MR. DRATEL: If the government doesn't have to specify

15   the series of violations that constitute the crime, then the

16   jury is not tethered to anything legally in the context of what

17   the elements of the offense are and what the charge is. So,

18   for example, we don't know what was in the grand jury. I doubt

19   Mr. Duch's material was in the grand jury. He signed a

20   cooperation agreement in December. So they're going to put in

21   front of the jury a series of violations to establish the CCE

22   that the grand jury never saw. So, this is a variance of

23   significant proportion.

24   Also, essentially what the government wants to do is

25   have the option of a charge that is duplicitous in the sense

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1   that it includes many other offenses without defining them, and

2   that's something that's obviously a problem with respect to due

3   process, double jeopardy, all of that.

4   The question of the indictment is very different. If

5   the government's position were correct, all the Court would do

6   on these instructions would read the indictment and not read a

7   series of instructions about what the elements are of an

8   offense and explain them to the jury.

9   Also, you know, with respect to Counts One, Two and

10   Three, I don't think it's necessarily the case that they alone

11   would constitute a series because they may all be based on the

12   same single act. In other words, they can find Count One and

13   Count Two based on the same single transaction.

14   THE COURT: Well, in fact, there's case law about some

15   of the points that you have raised, and let's just take the

16   double jeopardy point, and the way it appears to be dealt with

17   is if there's a conviction on the CCE charge, then you deal

18   with that at sentencing. And you may end up dismissing, for

19   instance, a conviction on a conspiracy charge, but it's a

20   sentencing issue. That's the way I read the case law for the

21   double jeopardy issue.

22   In terms of the violations for the grand jury, let me

23   hear from you, Mr. Turner. It does strike me that certainly

24   there were statements in the indictment as to thousands of

25   transactions and that was part of the indictment and,

1   therefore, the fact that you have put on evidence of one of

2   those vendors and buyers is just proof of that.

3   MR. TURNER: I don't think that has anything to do

4   with what we can prove to the jury. To give your Honor an

5   example from a different context. Overt acts: Where you have

6   to specify an overt act as part of a conspiracy, part of the

7   standard instruction the to the jury is you don't have to find

8   that that specific overt act was the overt act. You're free to

9   find that any other overt act satisfies the overt act

10   requirement.

11   It's the same here. We're not suggesting -- of course

12   we're not suggesting that the elements of the crime should not

13   be instructed to the jury, but that's different from limiting

14   the government to a specific theory or limiting the jury to a

15   specific finding that it has to make when numerous alternative

16   findings would satisfy the elements.

17   THE COURT: How about the point Mr. Turner just made,

18   Mr. Dratel, on the overt act? That does seem to have some

19   traction.

20   MR. DRATEL: I think it's really more like a R.I.C.O.

21   where you have predicate offenses that are the underlying bases

22   for the count and those have to be enumerated, charged and

23   proven separately; otherwise, you have no idea what the jury is

24   doing. If the government has thousands of transactions, it

25   shouldn't be that difficult to list them for the jury or to

1   identify them for the jury in a way that protects Mr. Ulbricht

2   from this moving target that we'll never know what is the basis

3   for this count. Just by saying, well, there's drug-dealing on

4   the site, you won't be able to do that in a R.I.C.O. Well,

5   it's an organized crime operation, so therefore pick -- and

6   those cases initially were like that, they were all reversed or

7   changed to the extent that you couldn't just have predicate

8   acts floating out there that were not specific and identified.

9   THE COURT: I'll let you respond. Let me find out how

10   the jury is doing. We're waiting on five.

11   MR. TURNER: You can say this with respect to any

12   crime, your Honor. You can say wire fraud, unless the

13   government has spelled out in the instructions what were the

14   constituent acts of the wire fraud, then we'll never know what

15   the jury was thinking. It's the jury's business to determine

16   what proof meets the elements. That's the way it works.

17   So here, we have the charge in the indictment. It's

18   up to the jury to decide whether the proof the government has

19   presented meets the elements of the crime and the government

20   doesn't have to again instruct the jury that only if you find

21   the proof is met, that the proof meets the elements in this

22   particular way, can you find the defendant guilty. No. It's

23   up to the jury to figure out on their own whether there is

24   sufficient proof to meet the elements. That's their job. And

25   this charge is no different from any other in that respect.

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1   MR. DRATEL: If he's talking about wire fraud, a

2   substantive wire mail fraud count has the actual transmission

3   as the crime. It's identified in the indictment. This is not

4   a conspiracy.

5   THE COURT: Let me consider those arguments against

6   the case law and we'll take it from there.

7   While we're waiting for the jurors, let's just go on.

8   Page 69, there are two changes. I agree that as to the first

9   shaded language, it's unnecessary and confusing actually to the

10   Court, that's the shaded language, the insertion of "but any

11   such person." I assume that the next portion of language is a

12   governmental insertion, and I would like to hear from the

13   defendant whether or not he agrees.

14   Mr. Turner, am I right about that?

15   MR. TURNER: Yes, your Honor.

16   THE COURT: I don't think either of these insertions

17   are frankly necessary.

18   MR. TURNER: I can explain the reason why we thought

19   it was necessary.

20   THE COURT: Why don't you tell me your reason.

21   MR. TURNER: Because the language in the instruction

22   as it exists focuses on employer/employee-like supervision, and

23   we have actually two theories on the organizer supervisor

24   manager relationship, and one is the fact that this individual,

25   this defendant, supervised a number of employees or contractors

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1   who were working under him, that's one theory, but he was also

2   an organizer of others. The vendors, he organized all of their

3   activities into essentially one orderly enterprise in the sense

4   there is very specific Second Circuit language approving of

5   that theory. That's a theory we want to argue to the jury and

6   that's why we'd like it reflected in the instructions.

7   THE COURT: Let me understand that argument. Is it

8   the government's position that to focus for a moment on the

9   word "organize" or "organizer" as this element can be read to

10   do, or it has three different parts but focusing on

11   "organizer," is it the government's position that the

12   defendant, if he had no other administrators, would nonetheless

13   have organized whatever number of vendors there are and, in

14   fact, organized whatever buyers there are through the

15   implementation of electronic processes?

16   MR. TURNER: I think we focus on the vendors, but the

17   answer is yes. So if you had a kingpin who, let's say, didn't

18   have anybody who was his employee, not that you would

19   characterize it that way, but he nonetheless had a whole

20   network of vendors and that his activity was crucial into

21   organizing them all into one effective project or one effective

22   enterprise, that would meet the terms of the statute as the

23   Second Circuit has specifically defined organizer in this

24   context. This is verbatim Second Circuit language.

25   MR. DRATEL: Applied in a very, very different

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1   context, --

2   MR. TURNER: I don't think so.

3   MR. DRATEL: -- not in the context that they're

4   talking about, people, buyers and sellers out in the world,

5   completely disconnected from the defendant on a real-world

6   level.

7   MR. TURNER: We're talking about a continuing criminal

8   enterprise.

9   THE COURT: This is a mob case. I forgot which one

10   you cited. What's the name of the case?

11   MR. TURNER: I was just going to check my notes, your

12   Honor. I can pull it up. I believe the circuit is just

13   defining those terms supervisor, organizer, manager generally

14   and that's the way it defines "organizer," but I can pull it

15   up, your Honor.

16   THE COURT: I can look back at your original

17   instruction and see what you cited.

18   MR. TURNER: I think the whole point of the statute is

19   to go after someone who builds an enterprise, and you can do

20   that in a number of ways.

21   THE COURT: Let me throw this out there, but tell me

22   what your view is on how it's different from -- and it's

23   somebody who is a broker and what they do is they send out

24   instructions for everybody to call an automated phone line and

25   push the button "I'd like to buy now," and 15 people call in.

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1   So it's one person working out of his own home, he's got a

2   bunch of stray cats wandering around wanting to sell drugs, he

3   says "Fine, if you want drugs, call this number and push the

4   button, press one," he's organized them. Does that constitute

5   organizer?

6   MR. TURNER: I think it could. I think if you're

7   creating an enterprise there that is something different than

8   what existed before. If you are building a substantial

9   enterprise and you are the key organizer of that enterprise,

10   then you can do that in a number of ways. There are other

11   elements of the statute, as well. You have to yourself receive

12   substantial profits from the enterprise. It can't just be some

13   guy in the street who is brokering some deals --

14   THE COURT: Although $1,400 was found to be

15   substantial in one of the cases. I'm saying the word

16   "substantial" is --

17   MR. TURNER: That's the flexibility of the statute, I

18   suppose. There are differences between the terms organizer

19   supervisor and manager. Supervisor and manager mean something

20   different than organizer; and the way the Second Circuit has

21   specifically defined it is exactly the way we put it in the

22   instruction.

23   MR. DRATEL: I don't think the Second Circuit ever

24   defined it as customers.

25   MR. TURNER: Again --

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1   THE COURT: He was focusing on vendors. What's your

2   view on the point regarding vendors?

3   MR. TURNER: The vendors are -- the organizational

4   aspect of it in the context of those cases is much more clearly

5   connected in terms of an organization.

6   This is not an organization. There is no way the

7   government can claim this is an organization. So in the

8   context of organize, organize is a root of organization.

9   Vendors are not part of an organization. Even under the

10   government's theory, they avail themselves of a website; it's

11   not an organization. And that's what this statute is about.

12   It's not about a landlord, even if the landlord is

13   liable being the organizer because he rents out space to people

14   who deal drugs, that's not a CCE. It's never been.

15   THE COURT: Let me consider all of that.

16   We have also got on page 72 -- are we still waiting

17   for some folks?

18   THE DEPUTY CLERK: Two more.

19   THE COURT: We have conspiracy to commit or aid and

20   abet computer hacking. Now, the indictment does charge aiding

21   and abetting for computer hacking.

22   MR. DRATEL: That's just the same question, but it

23   says to commit or aid and abet. I know it charges that. I

24   think it's just the same argument as before about the

25   conspiracy to aid and abet. I don't think this is an aid and

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1   abet conspiracy. This is a conspiracy to aid and abet. My

2   objection is to the legal concept of a conspiracy to aid and

3   abet. That would not be appropriate.

4   THE COURT: Tell me, Mr. Turner, how you folks read

5   this. Do you read it as a conspiracy to commit or a conspiracy

6   to aid and abet computer hacking, or do you read it as a

7   conspiracy to commit computer hacking and separately

8   potentially aiding and abetting computer hacking?

9   MR. TURNER: It's a conspiracy to commit or to aid and

10   abet computer hacking; that's the way it's charged. So there's

11   an agreement with others to commit computer hacking or to aid

12   and abet others in computer hacking.

13   THE COURT: In other words, the jury could not find

14   conspiracy but could find aiding and abetting computer hacking?

15   MR. TURNER: No. It's a conspiracy charge.

16   THE COURT: I think that's what I'm trying to figure

17   out in terms of how you read it, because one could parse the

18   language in two different ways.

19   MR. TURNER: The object of the conspiracy is to commit

20   or aid and abet computer hacking.

21   THE COURT: So it is exactly the same issue. Then

22   we've got the same issues appear on page 73. I think those are

23   the same issues.

24   MR. DRATEL: Yes.

25   THE COURT: It's the same issue on page 75, so those

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1   all flow from that issue.

2   The next change I have is on page 83. It's the

3   deletion of the term "funds." Did anybody disagree with that

4   deletion?

5   MR. TURNER: Your Honor, I'm sorry. Could we go back

6   to 73. I think there was an additional change --

7   THE COURT: I'm sorry. You're right.

8   MR. TURNER: -- which would include any computer

9   connected to the Internet.

10   THE COURT: Correct. Whose change was that?

11   MR. DRATEL: That was mine. And the reason would be I

12   think that's the equivalent of a directed verdict on that

13   element. It's kind of like with the interstate commerce and

14   some of the other aspects about drugs. I think the current

15   state is not to tell the jury that a specific piece of evidence

16   satisfies that element. It may not be a dispute, but I think

17   it's somewhat of a directed verdict on that issue.

18   THE COURT: Mr. Turner.

19   MR. TURNER: Well, your Honor, I think it's providing

20   an example to the jury of what a protected computer can mean.

21   All it says is "...which would include any computer connected

22   to the Internet." It doesn't say that the computers in this

23   case have been proven to be connected to the Internet or

24   anything like that.

25   THE COURT: I now understand the back and forth on

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1   that issue, so let me circle back to it. Then if there is

2   nothing else, let's go to page 83, and that's a deletion by the

3   defendant. Does anybody have a problem with that deletion?

4   MR. TURNER: Yes, your Honor. I think it's an

5   accurate statement of the law. They need to understand that

6   "funds" includes a medium of exchange so that the government

7   can argue that bitcoins are funds under the statute.

8   THE COURT: Mr. Dratel, do you disagree that it's a

9   correct statement of the law?

10   MR. DRATEL: The basis for the objection is consistent

11   with our pretrial motions in respect to the money laundering

12   counts.

13   THE COURT: I will then keep the fund language

14   consistent with my ruling on that motion.

15   Page 85, there is a deletion and insertion. Is it

16   your deletion?

17   MR. DRATEL: It's my deletion.

18   THE COURT: It's Mr. Dratel's deletion.

19   MR. DRATEL: Both are mine.

20   THE COURT: Why don't you tell me the basis.

21   MR. DRATEL: Sure. I'll take the second one first.

22   It just says "each potential conspirator." I think there has

23   to be a conspirator, not a potential conspirator, but the

24   larger one in the first paragraph is --

25   THE COURT: Let me make sure we're in the same place.

1   Page 85, this is on money laundering?

2   MR. DRATEL: Yes.

3   THE COURT: The third element.

4   MR. DRATEL: Yes. And the first one I mentioned is

5   just that the last word of the second paragraph, the word

6   "potential."

7   THE COURT: I see. There's also the insertion in

8   between.

9   MR. DRATEL: Right.

10   THE COURT: That's not yours?

11   MR. DRATEL: Wait. No. I think they're all mine, but

12   the first sentence that is deleted, with the one that begins

13   with "The government does not have to," it's our position --

14   and I understand what the state of the law may be -- but it's

15   our position that it would have to be specified because

16   otherwise, again, we'd have the same problem of the jury

17   basically passing on something that is not even in the case.

18   It says -- I take out the word "only," that the government has

19   to prove that the individuals agreeing knew that the defendant

20   knew the transactions involved the proceeds, because I believe

21   that's an element of the offense is the defendant's knowledge.

22   THE COURT: We're waiting on two jurors who have been

23   among those coming in a little bit later on another occasion.

24   One of them number three has said that he's on his way. He has

25   communicated with Joe, but we haven't heard from number six, so

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1   he's going to try to find out where she is.

2   Mr. Turner, why don't you respond to what Mr. Dratel

3   just said.

4   MR. TURNER: I think this is a pretty simple one, your

5   Honor. The defendant's view of the law, I mean, basically is

6   an instruction which reflects what the defendant desires the

7   law to be but not what it is. 1956 is very clear that while

8   the government has to prove that the proceeds actually did come

9   from specified unlawful activity, as far as the defendant's

10   state of mind is concerned, the government only has to prove

11   the defendant knew the proceeds came from some form of unlawful

12   activity. The statute is explicit about that.

13   THE COURT: I do agree with you, Mr. Turner, that that

14   is the current state of the law.

15   MR. DRATEL: What about "potential"?

16   THE COURT: The word "potential"?

17   MR. TURNER: No objection.

18   THE COURT: We'll take out the word "potential."

19   The next page, page 86, the first change is simply a

20   typo. "It concerns," and then the insertion of the words "the

21   purpose." And then down at the bottom there's an additional

22   sentence, which I think is a correct statement of the law.

23   MR. DRATEL: I would take out the "again."

24   MR. TURNER: No objection.

25   THE COURT: No objection?

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1   MR. TURNER: No.

2   THE COURT: Page 89, variance in dates. This struck

3   me as language changes and not anything particularly

4   substantive.

5   MR. TURNER: I think that's right. We just wanted to

6   make clear that there's case law holding that as long as we

7   prove that conduct occurred within the dates, not even

8   necessarily around the dates. This is basically in response to

9   the defense's argument that oh, well, he was involved, but then

10   he left. We would argue that, if so, that's conduct within the

11   date range and is still leaves him liable.

12   THE COURT: Mr. Dratel, do you have any problem with

13   this?

14   MR. DRATEL: I think the second sentence, the Court

15   instruction was the correct instruction and the traditional

16   instruction. That's what I think it should be as far as the

17   second sentence.

18   THE COURT: In other words, you would not have any

19   conduct alleged, you object to the insertion of that and would

20   keep "These events or transactions occurred."

21   MR. DRATEL: I'm sorry. Third sentence. I'm sorry.

22   THE COURT: Third sentence. As long as there is a

23   substantial similarity between the dates alleged, etc., etc.,

24   that was the way it was.

25   MR. DRATEL: Yes.

1   THE COURT: And you prefer that over "the conduct

2   occurred around any dates or within any time periods."

3   MR. DRATEL: Correct. Because that means it could

4   occur without -- that language could have it occur outside the

5   time period of the indictment.

6   MR. TURNER: Which is fine, as long as it's around the

7   time period.

8   MR. DRATEL: I don't think so.

9   MR. TURNER: No. That's what substantially similar

10   means.

11   THE COURT: It's within any time period the indictment

12   alleges.

13   MR. TURNER: That's what we want to make clear.

14   THE COURT: The cases I think talk about substantial

15   similarity. Let me see what you cited, Mr. Turner, as to

16   whether or not the breadth of it supports what you're saying,

17   but I'm more used to substantial similarity language.

18   MR. TURNER: Can we provide that case law later in the

19   day?

20   THE COURT: You may have had it already in your

21   initial instructions. I just didn't think there was a --

22   MR. TURNER: This is a modification based on the

23   defense's opening, but there is support in the law for the

24   "within" concept.

25   THE COURT: Give me what you have.

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1   MR. TURNER: Sure.

2   THE COURT: Fine. Page 90, venue, this is a case in

3   which venue has received more attention than some cases. I

4   think it is worth inserting the following sentence after the

5   first sentence. I think it's implicit, but I think in this

6   case it's perhaps more useful than in some cases to hold this

7   out. The insertion would be "You must make a separate venue

8   determination with respect to each count." Otherwise, I am

9   fine with the changes that have been proposed.

10   MR. TURNER: We have no objection to that change, your

11   Honor.

12   MR. DRATEL: No, your Honor. No objection.

13   THE COURT: Now, that's for that page, page 90. Now,

14   on the next page, it's still in the venue section, but there

15   are debates or disputes between the parties as to the deletions

16   on these pages. So the *Rowe* case does appear to support the

17   first recitation of the law.

18   Are you folks okay or do we need a very short break

19   before we start? Let's get going. Bring Mr. Duch out.

20   The Remiroyer (ph) case is I think the second case for

21   the second paragraph there that, when I was going over it, it

22   does appear that the law is clear, it's preponderance. I

23   understand your point. Mr. Dratel, I assume for you, it's your

24   argument for reasonable doubt for that for venue, but you

25   understand the law is against you on that --

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1   MR. DRATEL: Yes.

2   THE COURT: -- for just venue, only venue in terms of

3   the reasonable doubt.

4   MR. DRATEL: I'm sorry?

5   THE COURT: The only element which the jury finds by a

6   preponderance is the venue element. Every other element is

7   beyond a reasonable doubt.

8   MR. DRATEL: Right.

9   THE COURT: Let's bring out the jury.

10   (Continued on next page)

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F1tgulb1   Trial

1   (In open court; jury present)

2   THE COURT: Good morning, ladies and gentlemen.

3   Mr. Duch, I remind you that remain under oath from

4   yesterday.

5   THE WITNESS: Yes.

6   THE COURT: Mr. Dratel, you may proceed.

7   MR. DRATEL: Thank you, your Honor.

8   MICHAEL DUCH,

9   CROSS-EXAMINATION CONTINUED

10   BY MR. DRATEL:

11   Q. Good morning Mr. Duch.

12   A. Good morning.

13   Q. Now, going back to your initial meetings with the

14   government back in February of 2014, you were initially told

15   that you would have to plead guilty to everything that you did,

16   right?

17   A. That's correct.

18   Q. But you didn't, right?

19   A. I did not.

20   Q. And with respect to your cooperation agreement with the

21   government, it's required that you provide substantial

22   assistance to the government, right?

23   A. Can you repeat the question, please.

24   Q. Sure. Your cooperation agreement requires you to provide

25   substantial assistance to the government, correct?

F1tgulb1   Duch - cross

1   A.   That's correct.

2   Q.   And the government is the sole decider as to whether or not

3   you have provided that substantial assistance, correct?

4   A.   That's correct.

5   Q.   Now, you haven't been asked to testify against anyone with

6   respect to Atlantis, correct?

7   A.   That's correct.

8   Q.   And Atlantis, just to refresh, is another website that you

9   sold drugs on, right?

10   A.   That's correct.

11   Q.   And you haven't been asked to testify about anybody with

12   respect to BMR, right, which is another website of that sort?

13   A.   That's correct.

14   Q.   So the only case you're testifying is this case, right?

15   A.   From what I understand, yes.

16   Q.   Now, you testified yesterday that you sold drugs on

17   Atlantis, correct?

18   A.   Yes, I did.

19   Q.   But initially, you denied that you sold anywhere but Silk

20   Road, right?

21   A.   No. I did mention that I did have accounts on Atlantis as

22   well as Black Market Reloaded.

23   Q.   And that's BMR, right, Black Market Reloaded?

24   A.   That's correct, BMR.

25   Q.   Let me show you what's marked as 3514-2. I'm sorry.

F1tgulb1   Duch - cross

1   3514-10. Page two, 3514-10, and just look at the document.

2   I'll show you where to look.

3   But you met with the government on October 14, 2014,

4   correct?

5   A.   That's correct.

6   Q.   Let me just show you this highlighted portion. Did you not

7   deny -- withdrawn.

8   Did you not at first tell the government that you only

9   sold drugs on Silk Road?

10   A.   No, I did not. From what I understand, the government was

11   aware I also had accounts on BMR as well as Atlantis, and it

12   was my testimony yesterday that I did transact drug deals on

13   those sites as well.

14   Q.   You testified to that yesterday, but the question is when

15   you first talked to the government or when you talked to them

16   October 14 whether or not you sold only on Silk Road?

17   A.   The statement here says that I sold drugs only on Silk Road

18   but --

19   THE COURT: Don't read it in. He's asking you whether

20   or not that refreshes your recollection. If it doesn't, it

21   doesn't. If it does, it does.

22   THE WITNESS: It does not because, again, I did

23   sell --

24   THE COURT: That's the answer.

25   THE WITNESS: Okay.

F1tgulb1   Duch - cross

1   Q. So you first saw Silk Road, the website, in October 2012,

2   correct?

3   A. That's correct.

4   Q. And you were already back on heroin as of August of 2012,

5   correct?

6   A. That was the time that I relapsed, yes; that's correct.

7   Q. And yesterday you said you bought heroin once on Silk Road,

8   correct?

9   A. Yes, I did.

10 Q. And didn't you tell the government in your first interview

11 with them that you didn't buy any heroin on Silk Road?

12 A. I don't remember whether I mentioned that I did purchase

13 heroin at that time on Silk Road.

14 Q. That's not my question. My question is, didn't you tell

15 the government that you only bought Oxycontin, Oxycodone and

16 Methadone from Silk Road?

17   MR. TURNER: Objection; asked and answered.

18   THE COURT: Overruled.

19 A. Can you repeat the question.

20 Q. Sure. In your first interview back in February of 2014

21 with the government, did you not tell the government that you

22 bought only Oxycontin, Oxycodone and Methadone from Silk Road

23 and did you say that twice in that first interview?

24 A. Not that I can recall.

25 Q. Did you -- well, let me show you what's marked as 3514-2.

1   MR. TURNER: The government objects. There's no prior

2   inconsistent statement.

3   THE COURT: Let's see whether or not he can refresh

4   his recollection with it.

5   Q. Does this refresh your recollection that during the first

6   meeting with the government, February 6, 2014, you claimed that

7   you only bought Oxycodone, Oxycontin and Methadone or

8   Methylone? Which is it?

9   A. It was Methadone.

10   Q. Okay. So, did you tell the government that, and then --

11   and that you did it and that you told the government that

12   twice? Just read that sentence. See if that refreshes your

13   recollection.

14   A. No. I believe I told the government all of the drugs that

15   I purchased on Silk Road.

16   Q. You first started selling drugs on Silk Road April 2013,

17   correct?

18   A. That's correct.

19   Q. That's the first time you were ever involved in the

20   seller's contract or anything like that, correct?

21   A. That's correct.

22   Q. And you never saw the site in 2011 or 2012 until you got on

23   in October, right?

24   A. That's correct.

25   Q. Now, you claim that you didn't sell any drugs before Silk

F1tgulb1   Duch - cross

1   Road, right, before you sold on Silk Road, correct?

2   A.   That's correct.

3   Q.   But you were arrested in 2008 for possession with intent to

4   distribute drugs, right?

5   A.   That was the charge at the time.   That's correct.

6   Q.   And you pled guilty to a felony in that regard, correct?

7   A.   Yes, I did.

8   (Continued on next page)

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F1tdulb2   Duch - cross

1   Q.   So you went to jail ultimately, too, for that, correct?

2   A.   Yes, I did.

3   Q.   And, in fact, that's where you detoxed, correct?

4   A.   That's correct.

5   Q.   You also told -- well, this -- you also had a DUI in 1993,

6   right?

7   A.   Yes, I did.

8   Q.   And was that from sports injury pain?

9   A.   The DUI?

10   Q.   Yeah.

11   A.   No.

12   Q.   And then in 1997 you had a misdemeanor conviction for

13   possession of drugs, right?

14   A.   I don't recall that.

15   Q.   I show you what's marked as 3514-14. Look at the first

16   highlighted one.

17   1997, right, possession of drugs?

18   A.   Ah, yes.

19   Q.   You told the government in an interview that you didn't

20   begin using drugs until 2007/2008, right?

21   A.   No, that's not correct.

22   Q.   Well, do you still have -- do you still have 3514-10?

23   You met with the government, again, in October of

24   2014, correct?

25   A.   Yes, I did.

1   Q. Did you not tell the government that you first became a

2   drug user in approximately 2007 or 2008? Did you not tell the

3   government that?

4   A. My first drug use was at an earlier --

5   Q. That's not the question. The question is didn't you tell

6   the government in that meeting that you didn't become a drug

7   user until 2007 or 2008?

8   A. I told them that I did become a drug user in 2007/2008 but

9   that was not the first time that I was a drug user.

10   Q. Is that a technicality?

11   MR. TURNER: Objection to form.

12   THE COURT: Why don't you rephrase it.

13   Q. You told the government you became a drug user in 2007, in

14   2008, correct?

15   A. Yes, I did.

16   Q. So you really became a drug user well before that, right?

17   A. My first drug use is prior to that.

18   Q. So that was a lie you told the government, right?

19   A. No, it wasn't.

20   Q. No, OK.

21   You told them 2007/2008 -- when did you first start as

22   a drug user?

23   A. I probably used alcohol for the first time when I was 16.

24   Q. OK. What about other types of drugs?

25   A. Marijuana probably when I was 18.

1   Q.   And what year was that?

2   A.   1992.

3   Q.   So then 16 years before 2007 -- it was 15 or 16 years

4   before 2007/2008, right?

5   A.   Correct.

6   Q.   So when you say you became a drug user, you didn't include

7   the part from 1992 to 2007?

8   A.   Sure, I did. I mentioned that at the time.

9   Q.   Look at that again.

10   A.   Mm-hmm.

11   Q.   You told the government it was 2007/2008 is when you became

12   a drug user.

13   A.   That's what it says here, that's correct.

14   THE COURT: The question is does that refresh your

15   recollection that you said that?

16   THE WITNESS: It does not because my first drug use

17   was prior to that.

18   MR. DRATEL: That wasn't my question, your Honor. It

19   was not a refresh your recollection.

20   Q.   It was: Didn't you tell the government that?

21   A.   No, I did not.

22   Q.   You just said before that you did, right?

23   A.   My first drug use was prior to 2007 --

24   Q.   No, that is the not question.

25   THE COURT: You've got to let him finish and then you

F1tdulb2   Duch - cross

1   can ask him your question.

2   Q. The record will be what the record will be about what you

3   just said five minutes ago, right, where you said, yes, I told

4   the government I became a drug user in 2007, 2008.

5   You said that five minutes ago, right?

6   A. I became a drug user and first became a drug user are

7   different. There are distinctions.

8   Q. Became a drug user and first became, that is the

9   technicality you are going to rely on?

10 A. No. You are asking, you said became a drug user or first

11 became a drug user.

12 Q. You think there is a difference in that question?

13 A. I think there was a period of abstinence in between.

14 Q. Wait. You think there is a difference in that question?

15   THE COURT: Hold on. Let him finish.

16   Do you think there is a difference between those two

17 questions?

18   THE WITNESS: Yes, I do. First becoming a drug user

19 and reengaging in drug use --

20 Q. No. The word is "become," not "reengage."

21   THE COURT: Hold on. Let him finish and then you are

22 going to ask another question.

23   Go ahead. Mr. Duch, you may finish.

24 A. My first drug use is prior to 2007/2008, as I mentioned,

25 probable about 1992 for marijuana use. There was quite a

F1tdulb2   Duch - cross

1   period of abstinence, and I did reengage in drug use in the

2   years of 2007 and 2008.

3   Q. But you didn't tell them "reengage," you said became a drug

4   user in 2007/2008, right?

5   MR. TURNER: Objection, your Honor.

6   THE COURT: I will allow this last one and --

7   Q. You didn't use that term, right, "reengage"?

8   A. I'm not sure what term I used at the time.

9   Q. Now, you claimed on direct that you started using pain

10   killers first because of sports injuries, right?

11   A. That's correct.

12   Q. Didn't you tell the government, though, in October of 2014

13   that it was because of Lyme disease?

14   A. That was the reason why I was represcribed pain killers was

15   because of Lyme's disease, that's correct.

16   Q. And then when the doctor found out that you had used heroin

17   before, he refused to write you any more prescriptions for

18   OxyContin, right?

19   A. I believe that the course of antibiotics, the treatment was

20   successful and I no longer required the pain killers. And I

21   also did reengage in heroin use.

22   Q. OK. That was fine but except it wasn't the actual

23   question.

24   The question was didn't the doctor halt your OxyContin

25   or your oxycodone prescription because he found out you were

1   doing heroin?

2   A.   That was one of the reasons, yes.

3   Q.   And that was one of the reasons that you went back on

4   heroin more severely, right, because you couldn't get the

5   OxyContin any more, right?

6   A.   Because it became too expensive, that's correct.

7   Q.   To buy in the street?

8   A.   That's correct.

9   Q.   Yeah. So it was the doctor's fault that you went back on

10   heroin, right?

11   A.   Absolutely not. It's my fault.

12   Q.   Now, you took various security measures, correct?

13   A.   Regarding what?

14   Q.   Regarding Silk Road.

15   A.   Yes.

16   Q.   Regarding your online drug sales, right?

17   A.   Yes.

18   Q.   And in that seller's contract that we saw, it says,

19   "Security is of paramount importance," right?

20   A.   Of course.

21   Q.   And you used a different buyer's account from your

22   seller's -- withdrawn.

23   You created a different seller's account than your

24   buyer's account, correct?

25   A.   Yes, I did.

1 Q. And that was a security measure, correct?

2 A. That's one of the security measures that the Silk Road

3 website advised people to do.

4 Q. Right. And you did that?

5 A. Yes, I did.

6 Q. And one of the things that you did that some other people

7 didn't do on Silk Road was you didn't even put up photos,

8 right?

9 A. That's correct.

10 Q. Because you knew from your computer background and your

11 security background that there is metadata in those, right?

12 A. That's correct.

13 Q. And so metadata can be of significant use in terms of

14 tracking, right?

15 A. Yes.

16 Q. And you wanted to eliminate that so you eliminated the

17 metadata, right?

18 A. Yes, I did.

19 Q. And you also down the road instituted limits or conditions

20 for customers, right?

21 A. Over a period of time, yes.

22 Q. And one of those reasons was because you were concerned

23 about who your customers were, right?

24 A. Potentially, yes.

25 Q. By the way, your technical background made it easier for

1   you to operate on Silk Road, correct?

2   A.   I don't think it made it easier. I don't think that there

3   was any level of complexity required to engage in Silk Road

4   activity.

5   Q.   In that October 14th meeting with the government, didn't

6   you say that your technical background made it easier to

7   operate on Silk Road?

8   A.   I did not.

9   Q.   You did not tell the government that it was easier to learn

10   and operate on Silk Road due to your familiarity with the

11   technologies associated with it?

12   A.   The only technologies that were required is that you use a

13   Google search.

14   Q.   That was not my question.

15   My question is -- use a Google search? You can find

16   Silk Road on a Google search?

17   A.   Absolutely.

18   Q.   You can get to the Silk Road website on a Google search?

19   A.   You can find out the URL, that's correct.

20   Q.   But don't you have to get on Tor, though, too?

21   A.   Sure.

22   Q.   And you knew Tor already, right? You were familiar with

23   Tor?

24   A.   I was familiar with it, yes.

25   Q.   Did you not tell the government October 14, 2014, which is

F1tdulb2   Duch - cross

1   about three-and-a-half months ago, it was easier for you to

2   learn to operate on Silk Road due to your familiarity with the

3   technologies associated with it? Did you not tell the

4   government that?

5   A.   Not for the technologies associated with Silk Road.

6   Perhaps things like encryption which helps provide

7   confidentiality of data.

8   Q.   So you did tell them that?

9   A.   Tell them what?

10   Q.   What you just said. I'm asking a question --

11   THE COURT: Hold on. Let me just say, why don't you

12   rephrase the question.

13   BY MR. DRATEL:

14   Q.   You didn't answer the specific question so I will ask it

15   again.

16   Did you not tell the government October 14, 2014 that

17   it was easier for you to learn to operate on Silk Road due to

18   your familiarity with the technologies associated with it?

19   A.   Not to operate with the technologies associated with Silk

20   Road but to --

21   Q.   Didn't you tell the government that?

22   A.   No, I did not.

23   Q.   OK. Now, explain what you say when you say what

24   technologies enabled you to operate --

25   A.   I think to potentially ensure that there were additional

1 security measures, like recommending encryption, as well as

2 helping other users of Silk Road in the implementation of

3 encryption. That was something that my technical background

4 allowed me to at least help other people with and implement it

5 with my use of Silk Road.

6 Q. Now, you talked about your security measures, and you said

7 potentially you were concerned about who your customers might

8 be, right?

9 A. Sure.

10 Q. They might be law enforcement, right?

11 A. It's very possible.

12 Q. And because when you're on the computer, you're never quite

13 sure who is on the other side of a transaction or a

14 conversation, right?

15 A. That's correct.

16   MR. DRATEL: Nothing further, your Honor. Thank you.

17   THE COURT: All right. Thank you.

18   Mr. Turner, anything further from you?

19   MR. TURNER: Yes, your Honor.

20 REDIRECT EXAMINATION

21 BY MR. TURNER:

22 Q. You were asked on cross about an arrest you had in the past

23 for possession with the intent to distribute drugs, is that

24 right?

25 A. That's right.

F1tdulb2   Duch - redirect

1   Q. Were you convicted for possession with intent to distribute

2   drugs or were you convicted for something else?

3   A. I was convicted -- I was not convicted of possession with

4   intent to distribute. I was convicted of failure to turn over

5   a controlled dangerous substance to law enforcement.

6   Q. So it was a possession offense, not a distribution offense?

7   A. Essentially a possession offense.

8   Q. Did you ever deal drugs before you dealt drugs on Silk

9   Road?

10   A. I never have.

11   Q. You were asked about encryption. I just want to clarify.

12   At some point while you were dealing on Silk Road, did

13   you start requiring your customers to encrypt their messages to

14   you?

15   A. Yes, I did, all their messages as well as their addresses.

16   Q. Even though they were sending it, the messages to you on

17   Silk Road?

18   A. Yes.

19   Q. You wanted them to encrypt their messages further?

20   A. Within Silk Road, that's correct.

21   Q. Because you were worried about law enforcement?

22   A. Yes, I was.

23   Q. But it wasn't necessary -- that wasn't required to deal on

24   Silk Road, right?

25   A. It was not required. It was something that I implemented.

F1tdulb2   Duch - redirect

1   MR. TURNER: That's all, your Honor.

2   THE COURT: All right. Thank you.

3   Mr. Dratel, anything further from you?

4   RECROSS-EXAMINATION

5   BY MR. DRATEL:

6   Q. What were the facts of that arrest? In other words, what

7   drug did you have that you were caught in possession of back in

8   two-thousand and -- in that arrest 2008?

9   A. I believe it was heroin.

10   Q. So you were allowed to plead to a lesser offense, correct,

11   of not turning over heroin to law enforcement authorities,

12   right?

13   A. That was -- the plea agreement was for a possession charge.

14   Q. Right. But how much heroin did you have on you when you

15   were arrested that you were charged with a felony?

16   A. I believe it was about 35 bags of heroin.

17   Q. And you weren't selling any of that?

18   A. None of it.

19   MR. DRATEL: Nothing further, your Honor.

20   THE COURT: All right. Thank you.

21   MR. TURNER: Very briefly, your Honor.

22   THE COURT: All right.

23   REDIRECT EXAMINATION

24   BY MR. TURNER:

25   Q. 35 bags, you mean 35 glassines?

1   A.   That's correct.   35 individual glassine bags.

2   Q.   How many bags were you using a day, approximately, at that

3   point?

4   A.   Probably about that.

5   MR. TURNER: Nothing further.

6   THE COURT: All right. Thank you. You may step down,

7   Mr. Duch.

8   (Witness excused)

9   THE COURT: Would the government like to call its next

10   witness?

11   MR. HOWARD: Yes. But before we do that, I want to

12   read one chat log.

13   THE COURT: All right.

14   MR. HOWARD: The witness is actually here. He is the

15   case agent.

16   THE COURT: Right. All right.

17   MR. HOWARD: Ms. Rosen, could you please publish

18   Government Exhibit 226B, please.

19   THE COURT: B, as in boy?

20   MR. HOWARD: That's correct.

21   This is from page 211 of a 1096-page chat log from

22   December 28, 2011.

23   "myself: anyway, this will be a good measure to see

24   how the new policies are affecting things

25   "vj: yeah - gotta get a solid handle on the old

F1tdulb2

1 metrics so that some real time comparisons can be made. But I

2 think that presented properly the new commish structure will be

3 greeted with open arms. Now – what happens when someone goes

4 ooe in 60 days from now?

5   "myself: account is terminated. There will be a big

6 warning in the seller's guide. Safe goes for getting customers

7 to finalize early. No more working the system

8   "vj: do they get a warning? And do we offer a bounty?

9 Or is that too rat like?

10   "myself: No bounty, don't need it. We can search the

11 pms and listings

12   "vj: then how do you know if there is an ooe going on?

13   "ahh – but you can't say you search the pms, and smart

14 cookies will pgp that shit. About 1/2 my clients use pgp all

15 the time in pm's. Seed buyers are a paranoid bunch. Just food

16 for thought.

17   "myself: ok, yea a bounty is a good idea, why not be

18 part of the scam prevention team :)

19   "vj: doesn't have to be official, just kinda let it be

20 known that if a vendor insists or asks for ooe, let a mod know,

21 we'll tip ya for your efforts – after all, why should the oflks

22 that pay subsidize the freeloaders

23   "yeah – make it so ooe is seen as a scam, through and

24 through."

25   The next part starts on page 273 to 274 of the 1,096

1   page chat log on January 9, 2012.

2   "myself: added this sellers guide:

3   "NOTICE: Do not create listings that instruct

4   customers to pay outside of escrow, or are used for any purpose

5   other than to list an item to be sold for the listed price

6   using the site checkout system. If you instruct your buyers to

7   pay you in any other way, or to contact you off-site, your

8   seller privileges WILL be revoked without warning. You may

9   provide back up contact methods in case of site failure.

10   "and buyers guide:

11   "NOTICE: If your seller instructs you to pay directly,

12   outside of the escrow system, or with any other method than

13   through the site checkout system, you should report it

14   immediately to our support staff via the "contact us" link

15   along with any evidence you can provide. If you do pay your

16   seller directly, there will be no way for us to protect you

17   from fraud.

18   "vj: pretty fucking clear. Perfect."

19   The government calls FBI Special Agent Vincent

20   D'Agostino.

21   THE COURT: All right. Mr. D'Agostino.

22   THE CLERK: Please raise your right hand.

23   VINCENT D'AGOSTINO,

24   called as a witness by the government,

25   having been duly sworn, testified as follows:

F1tdulb2

1   THE CLERK: Please state your full name and spell your

2   last name for the record.

3   THE WITNESS: Sure. First name Vincent. Last name is

4   D'Agostino, D-'-A-g-o-s-t-i-n-o.

5   THE CLERK: Thank you.

6   THE COURT: And Special Agent D'Agostino, you've heard

7   me give the instructions to folks. Make sure you adjust the

8   microphone so that you could speak clearly into it. There is

9   water there. Although is that your cup or somebody else's cup?

10   THE WITNESS: That's OK. I'm super hydrated.

11   THE COURT: All right. Mr. Howard, you may proceed,

12   sir.

13   DIRECT EXAMINATION

14   BY MR. HOWARD:

15   Q. Good morning, Special Agent D'Agostino.

16   A. Good morning, Mr. Howard.

17   Q. And who do you work for?

18   A. The FBI.

19   Q. And how long have you worked at the FBI?

20   A. A little over ten years.

21   Q. What is your position?

22   A. Special Agent.

23   Q. Where are you based?

24   A. Manhattan, 26 Federal Plaza.

25   Q. And are you assigned to a particular squad?

1   A.   I am.

2   Q.   And what squad is that?

3   A.   The Cyber Crime Squad, Squad CY2.

4   Q.   What are your responsibilities as a cyber special agent?

5   A.   Part of my responsibilities are to investigate any

6   violations of federal law as they relate to computer crimes.

7   So you conduct surveillance, interviews, interrogations,

8   forensic analysis, do search warrants, arrests, and testify.

9   Q.   In the course of your responsibilities as an FBI agent on

10   the cyber squad, have you analyzed and reviewed malware?

11   A.   Yes.

12   Q.   What is malware?

13   A.   Malware is short for malicious software. What it is, it's

14   basically bad programs that end up on people's computers that

15   are designed to steal sensitive information or give control of

16   your computer to somebody else.

17   Q.   What other terms are commonly used to refer to malware?

18   A.   Like adware, spyware. Other types of malware -- worms,

19   Trojans, viruses. Those are all types of malware, which is a

20   very generic term.

21   Q.   Now, have you reviewed malware purchased from Silk Road as

22   part of your investigation?

23   A.   I have.

24   MR. HOWARD: Now, Ms. Rosen, could you please publish

25   Government Exhibit 340A, which is already in evidence.

1   Q. Special Agent D'Agostino, do you recognize what Government

2   Exhibit 340A is?

3   A. Yes, I do.

4   Q. And what is it?

5   A. It's a receipt from a purchase of several packages of

6   malware that was given to me by Special Agent Gary Alford from

7   the IRS.

8   MR. HOWARD: So, Ms. Rosen, could we just zoom in on

9   the top section of this. Right here.

10   Q. Here it says "downers4u." Was that the undercover account

11   that was used to purchase the malware?

12   A. Yes, it was.

13   Q. Here it says: "From: Sniffsniff. HUGE hacking Pack

14   **150+ HACKING TOOLS&PROGRAMS."

15   A. Correct.

16   Q. Is that the listing that was purchased?

17   A. Yes.

18   MR. HOWARD: Will you zoom back out, please,

19   Ms. Rosen?

20   THE COURT: I think -- I'm sorry. Go ahead. I

21   thought something had gotten missed. It didn't.

22   Continue.

23   BY MR. HOWARD:

24   Q. Could we zoom in on this section, please.

25   And so what is this section of this document?

1   A. So since the purchase was made for software, these are

2   links that will give you access to download that software that

3   you purchased. So the top three being the ones you actually

4   paid for and then the lower six or so being the freebies that

5   are thrown in as extras.

6   Q. Now, after this was provided to you by Special Agent

7   Alford, did you test any of the links that were provided by the

8   Silk Road vendor?

9   A. I did.

10 Q. And what did you discover?

11 A. I tested the first three links and all three links were

12 active. So you can take any one of those three and drop them

13 into a browser, like Internet Explorer or Mozilla and it will

14 take you to a page where you can download the associated file,

15 which you can see -- like on the first link, for example, the

16 file name is actually huge underscore hacking underscore pack

17 dot rar, and that's the file that will be delivered to your

18 computer.

19 Q. Special Agent D'Agostino, you said you put these in a

20 browser. Are you referring to a Tor browser or a regular

21 browser?

22 A. Just a regular browser.

23 Q. Could you please flip in your binder to what's been marked

24 for identification purposes as Government Exhibit 1100.

25 A. OK.

F1tdulb2   D'Agostino - direct

1   Q. Do you recognize what this is?

2   A. I do.

3   Q. And what is this?

4   A. It's a screen capture of the download page for one of the

5   files that I downloaded.

6   Q. Did you take this screenshot?

7   A. Yes, I did.

8   MR. HOWARD: The government offers Government Exhibit

9   1100.

10   MR. DRATEL: No objection.

11   THE COURT: Received.

12   (Government's Exhibit 1100 received in evidence)

13   MR. HOWARD: So could we just zoom in on the center

14 area here.

15 Q. Special Agent D'Agostino, what is depicted here?

16 A. So this is showing you the file you're about to download,

17 which is called pack pound sign or I guess hash tag number

18 2.rar, and the file size, which is 2.37 gigabytes. It is a

19 large file. If you click "download to your computer," the

20 download begins.

21 Q. Now, did you in fact download the malware?

22 A. I did.

23 Q. Can you please flip in your binder to what has been marked

24 as Government Exhibit 1101.

25 A. OK.

1   Q. By the way, did you take any precautions before you

2   downloaded this malware?

3   A. Yes.

4   Q. And what did you do?

5   A. I would use a new machine that's disconnected from anything

6   else, not on a network, to avoid infecting that machine and

7   then inadvertently infecting other machines. So it is done in

8   what is called a sandbox.

9   Q. Could you please take a look at 1101, please?

10   A. Sure.

11   Q. Do you recognize this exhibit?

12   A. Yes.

13   Q. And what is this?

14   A. It's a screen capture I took of the contents, or some of

15   the contents of that file that I downloaded.

16   Q. Did you take this screenshot?

17   A. Yes.

18   MR. HOWARD: The government offers Government Exhibit

19   1101.

20   MR. DRATEL: No objection.

21   THE COURT: Received.

22   (Government's Exhibit 1101 received in evidence)

23   BY MR. HOWARD:

24   Q. So, Special Agent D'Agostino, can you walk us through

25   what's depicted hire?

1   A.   So the file itself comes in a container or a compressed

2   package. So rather than having to download hundreds of

3   separate files, what they do is it is compressed into one file

4   called pack#2.rar. Within that file is all the files that you

5   see below. It is actually -- these are just some of them.

6   This is number 1 through D in alphabetical order. So these

7   files are contained within that file that I downloaded.

8   And they are organized by category. So you'll see

9   different piece of malware that are labeled by their brand

10   name, like Blackshades. You'll see some of these are organized

11   by what they do, like Booters, Botnet, Brute Forcers, Chat

12   Exploits, Anonymity, Admin Page Tools.

13   Q.   Can you just be explain a couple of these? Do you know

14   what a brute forcer is?

15   A.   Sure. So a brute forcer would be if we're going to obtain

16   someone's file that is password protected and you wanted to

17   gain access to that file, you can brute force attack it with

18   lists of predetermined password combinations. So a program

19   will basically take a file that presumably you are not supposed

20   to have access to and run passwords against it until it figures

21   out what that is.

22   Q.   Here's one right above Brute Force that says Botnet.

23   A.   Sure.

24   Q.   Do you know what a botnet is?

25   A.   Yes. A botnet is when your computer gets infected with bot

1 software that turns your computer into essentially a slave, and

2 then a bot master can control that computer and tell it what to

3 do. So it can tell it to attack another computer so that if it

4 were to be investigated all the information would be back to

5 your computer, as opposed to the person who is really behind it

6 who is controlling it from two or three steps removed.

7 Q. Are you familiar with what Blackshades is?

8 A. Yes.

9 Q. What is it?

10 A. Blackshades is a RAT, which depending on who you ask can

11 stand for remote administration tool or remote access tool.

12 What it was was a hugely popular piece of software that people

13 could download from a website that would -- they could

14 customize and deploy on a victim's machine, which would give

15 them access to their Web camera, their hard drive contents.

16 They could open and close a CD-ROM tray. They could move the

17 mouse around. And that was a very, very popular piece of

18 software for a long time.

19   MR. HOWARD: Ms. Rosen, could we please slide down to

20 the bottom half of this screen, please.

21 Q. Here there is one that is he a called DDos, D-D-O-S.

22 A. Right.

23 Q. Do you know what that is?

24 A. Yeah. That stands for distributed denial of service

25 attacks. So what that is is there is software contained within

1   that folder that would allow you to attack an IP address or

2   website, let's say, and flood it with traffic to the point

3   where the site will actually go down and be inaccessible.

4   MR. HOWARD: Now, Ms. Rosen, could we go to the second

5   page of this exhibit, please. And let's zoom in on the bottom

6   half of this screen.

7   Q. Special Agent D'Agostino, this is just more folders in the

8   same package you downloaded, correct?

9   A. Correct. It is the next series in alphabetical order from

10   I guess H to P.

11   Q. So here there is one called password stealers. Do you know

12   what that contains?

13   A. Yes. It is software specifically designed to put on

14   someone's computer so that every time the victim would enter in

15   a username and password, it would collect that data and either

16   send it to a separate file that you would collect later

17   physically, or it could send that file out remotely over the

18   Internet to the owner of the program.

19   Q. And the last one I'll go over is keyloggers up here, which

20   is highlighted in gray. What is that?

21   A. Keyloggers are probably some of the most popular forms of

22   malware. They are what they say they are. They actually

23   record every keystroke on your computer. So as you're

24   operating your machine, you're typing in emails, passwords,

25   business documents, there is a program running in the

1   background that you are unaware of that is copying every letter

2   down and that will send that data to the person who infected

3   your machine to do with what they want.

4   Q.   Now, did you test any of the malware that was included in

5   this hacking pack?

6   A.   Yes.

7   Q.   And generally what did you discover?

8   A.   The software did what it promised to do according to

9   category. Almost all the software in here was -- worked very

10   well in a Windows-based operating system.

11   Q.   To be clear, did you test all of the software or just did

12   you select some of them?

13   A.   No, I did not test all of it.

14   Q.   Now, focusing on keyloggers, did you test any keylogger?

15   A.   Yes.

16   Q.   Was that the program called syslogger?

17   A.   Correct.

18   Q.   Can you please flip in your binder to what's been marked

19   for identification purposes as Government Exhibit 1102, please?

20   A.   OK.

21   Q.   Do you recognize what this is?

22   A.   Yes.

23   Q.   What is this?

24   A.   It's a screen capture that I took of the syslogger program,

25   the front page when you run that actual program.

1   Q. Did you take this screenshot?

2   A. Yes.

3   MR. HOWARD: The government offers Government Exhibit

4   1102.

5   MR. DRATEL: No objection.

6   THE COURT: Received.

7   (Government's Exhibit 1102 received in evidence)

8   MR. HOWARD: And could we just zoom in on this window

9   here.

10   Q. So Special Agent D'Agostino, this is the window that pops

11   up when you open the program?

12   A. Correct.

13   MR. HOWARD: May I approach the witness, your Honor?

14   THE COURT: You may.

15   Q. I just handed you what's been marked for identification

16   purposes as Government Exhibit 1103. Do you recognize this

17   exhibit?

18   A. I do.

19   Q. And what is this exhibit?

20   A. It's a CD containing a demonstrative video that I created,

21   which also has my initials on the CD.

22   Q. Would this video aid your testimony today?

23   A. Absolutely.

24   MR. HOWARD: The government offers Government Exhibit

25   1103 for demonstrative purposes.

F1tdulb2   D'Agostino - direct

1   MR. DRATEL: No objection, your Honor.

2   THE COURT: Received.

3   (Government's Exhibit 1103 received in evidence)

4   MR. HOWARD: May I approach the witness, your Honor?

5   THE COURT: You may.

6 Q. Special Agent D'Agostino, can you just please explain what

7 is being depicted in the video as it is being played?

8 A. Sure. So we're starting out on what would be the buyer's

9 machine. It is a clean installation of Windows, and I'm

10 running the keylogger program, which is called "Syslogger

11 Builder."

12   Can you pause it for a second.

13   And so when you run the program, after you were to

14 purchase the software, you download it, you execute the file,

15 and this is the page that comes up. And this is what I would

16 call a build a malware screen. So this screen allows you to

17 design your piece of malware to whatever you want it to do. It

18 is very, very customizable.

19   So on the top right, you can see under

20 "Specifications," the default setting is to send the data over

21 SMTP. What this means is that you are going to put in an email

22 address in here on the top right, and that is where all the

23 stolen data from the victim's machine is going to be sent to.

24 Q. Are you referring to this part of the window?

25 A. That's correct.

1   THE COURT: What does the word "execute" mean?

2   THE WITNESS: Execute is just a fancy word for like

3   running a program. So when you execute that file you are just

4   running it. You just double click on the file.

5   BY MR. HOWARD:

6   Q. Do you mind using your laser pointer to point out there the

7   screen you are talking about?

8   A. So that is where you would enter in the email address of

9   where -- once this software is installed on victim's machine,

10 that's where it is going to send all of the stolen date to. So

11 I created a fictitious account for demonstrative purposes.

12   You could hit play.

13   So that's the Gmail account I created. And what's

14 nice about this interface, it will allow you to test the

15 settings. So you click "test mail," it actually goes through

16 and sends a test email to make sure that you had entered in the

17 password correctly.

18   So now on the left side here, you can go through and

19 select what you want the program to do. And so there's things

20 like Antis is the first option, Stealers, Delete Cookies, Block

21 anti-virus Sites, Melt, Mutex, Startup.

22   You can pause it for a second.

23   And what those allow you to do, like there is also

24 Screen Logger. So you could tell it, for example, you want

25 this software to, once it builds it, to be able to avoid being

F1tdulb2   D'Agostino - direct

1   detected by antivirus software like, you know, Kaspersky or

2   Norton antivirus or BitDefender. So you check that box, which

3   makes the program build in such a way that when it gets sent to

4   the victim's machine, their antivirus will never catch it.

5   You also have stealers so that will look for anytime a

6   password is entered into a browser to log into Gmail or Yahoo!,

7   that will specifically pull that information out for you.

8   Block antivirus sites, that will prevent the victim

9   from going to an online antivirus site to clean their machine.

10   So if they begin to suspect something's up, they can go

11   antivirus.com. They run a scan. Only this will actually block

12   certain sites like that from ever appearing.

13   And then screen loggers. Screen loggers, the program

14   will take an actual screen capture of what your computer's

15   doing at whatever interval you set. So that screen capture

16   will look very much like what you are looking at on that

17   monitor right now.

18   And, finally, where it says "enable error," here you

19   can customize it so that once it's installed successfully, you

20   can make a message pop up on the victim's machine and say

21   anything you want. The default setting is so that it posts a

22   message saying that the program never installed correctly,

23   thereby giving the victim a false sense of comfort that, oh,

24   whatever this was never actually installed. So for the

25   purposes of this demonstration, I just added in a generic

1   message, I believe.

2   You can hit play.

3   So the default error message says the application

4   failed to initialize properly. And I added "please double

5   click and try again," which would cause the person to rerun the

6   malware again to make sure it installed properly. So that's

7   what the message allows you to see, what it would look like.

8   So I clicked "Test Error" and that's what pops up.

9   Then on the bottom right here, I am setting the

10   interval. I set it extremely low as to alert me every minute.

11   So every minute it is going to send me data that it's stealing.

12   Ideally, you probably wouldn't want it that often but for the

13   purposes of the demonstration.

14   So then -- pause it for a second.

15   So once you select the options you want, then you

16   click on build, which is "Build Server," which is that button

17   right there. And then it makes an executable file, a file

18   that's runnable that now does the things that you just set it

19   to do. So I quickly saved the file. I think I called it

20   "badfile" initially. And now the next step is to put it in a

21   package so that I could deliver it to a victim's machine, which

22   you'll see in the next video.

23   You could hit play, please.

24   So there's the "bad file" that I created. That's the

25   actual malware.

1   Q. Special Agent D'Agostino, that was customized with all the

2   features you selected?

3   A. Exactly. It will only do the things that I told it to do

4   and nothing more, nothing less based on those features that I

5   selected.

6   So since nobody would open bad file.exe, I named it

7   cute dogs, because everybody would open cute dogs.exe -- at

8   least I would. What I'm doing now is putting the file in a

9   container much like when I originally downloaded the malware so

10   that it will slip pass Gmail virus scans. There is a lot of

11   different ways to do this. This is the most simple way for

12   purposes of the demonstration. And what this does is this

13   hides what it actually is within a container. So when it's

14   emailed out, most of the time your email will catch simple

15   viruses and malware. By doing it this way it will pass right

16   through.

17   So now I'm sending the attachment to another created

18   email address up here.

19   Q. The name of the account is victimuser2626?

20   A. Yes.

21   Q. You created that account for this demonstration?

22   A. Yes, something to entice the person to open it.

23   Q. So here you're delivering the malware by email. Are there

24   other ways to deliver the malware?

25   A. Yes. The most common is via email or through an actual

1   website. But physical access to the machine we're seeing more

2   and more where people will -- you'll have a friend or family

3   member that's, you know, into computers and you'll have him

4   come over to fix something and they'll actually bring a thumb

5   drive and drop the file onto your machine without you knowing.

6   But, still, the most common is by email.

7   Q. Now you are attaching the malware?

8   A. Yes. You attach the file, and it should get through the

9   scan because it's in a compressed format and now it's sent. So

10   there's the sent email confirming it went out.

11   So now this is the victim's machine. This is another

12   clean installation of Windows 7, 64-bit. The victim then would

13   log on to their Yahoo!

14   Q. Now, to be clear, the video depicts a different computer?

15   A. This is a completely different computer.

16   So there's the email that was sent by the user of the

17   malware with the irresistible attachment, which will be opened

18   now.

19   So I'm saving the file to the desk-top, and I am going

20   to open that container.

21   I am putting in the password that was sent with the

22   file. In a normal circumstance, you wouldn't have password

23   protection on it but.

24   So now the file is being dragged to the desk-top and

25   the user, the victim, will run the file, or execute the file.

1   So it is just a double click.

2   And so you'll see the little busy -- you know, the

3   computer's working. But other than that, there is no

4   indication of what's going on.

5   Then it just sort of, the busy signal, the icon went

6   away, and the user -- the victim is left wondering, you know,

7   what the deal is.

8   So now the error message pops up, and that lets you

9   know that the malware was actually install successfully. So

10   that is the error message I created in an earlier step, which

11   prompts the user to double click the file, which -- if you want

12   to pause it for a second. One of the neat features about this

13   type of keylogger is it has a melt function. So once it is

14   installed, if you guys noticed, the file actually disappeared;

15   it has been deleted. And that's to remove traces of itself on

16   that machine. So in order for me to rerun it, I actually have

17   to open the container again, extract it again, and rerun it,

18   which I think is what I do here.

19   You can hit play, please.

20   Q. Special Agent D'Agostino, melt is of the options that you

21   selected from the control panel, right?

22   A. Yes.

23   So now the user's machine is infected. So from this

24   point forward everything they're doing is being logged. So for

25   the purposes of the video, I attempt to visit several different

1   sites, entering in data, login data, to see if it's actually

2   working. So, again, I'm attempting to log into the victim's

3   Yahoo! account. You'll notice the password was entered in

4   incorrectly the first time and you'll see that in a minute.

5   Spoiler alert. So I'm into the email account.

6   So now I'm just going to other sites. I think

7   eHarmony was the first site I went to. The second site I went

8   to is Gmail.com, and then I went to Facebook.

9   Now I'm just doing a Bing search.

10   Q. What is Bing?

11   A. It's a search engine, believe it or not, just like Google.

12   So just generic photos.

13   So now what I'm going to do is I'm going to switch

14   back over to the malware virus machine. So if things worked

15   well, and I think they did, you're going to see those emails

16   populating the in box with all the data that I preselected to

17   be stolen. So there it is. So you could see initially -- if

18   you want to pause it here -- this is from the moment it was

19   infected, it starts telling you everything that was done. And

20   so since I ran the program -- when you initially run the

21   program, the first thing that comes up is the D'Agostino fake

22   error message. It shows you that there was a Yahoo! message

23   that was being viewed. It tells you what's in the person's --

24   under their start menu, what programs are installed on their

25   program manager, so WinRAR. And they're right here. The first

F1tdulb2   D'Agostino - direct

1   time I executed -- the second time I opened that file, I had to

2   enter into a password of 1234 and it actually captured that.

3   And it shows you some of the other functions that we are

4   running.

5   You can hit play now.

6   So you can see on the right side that these messages

7   were coming in about every minute. This is the first screen

8   grabber, screen capture.

9   So once it was infected, the first thing it did was it

10   took a screen capture of the desk-top as it appeared. So any

11   icons you would have on your desk-top, now the person who

12   infected your machine would know what folders, what files were

13   there.

14   You can see here it also is showing you I went to

15   Internet Explorer, I was on the MSN site. No logs yet for

16   that. You could see here I went to Yahoo! login. It logged

17   that. I visited that site.

18   This would grab what's in your clipboard when you do a

19   copy and paste. I had nothing in there so there is nothing to

20   report.

21   Here is the second or third screen grab, which is when

22   I went to the Yahoo! site.

23   And so here -- if you want to pause it for a second --

24   when I went to -- I jumped from Yahoo!, which is the first

25   entry, then I went to eHarmony, and then I entered in my

1   credentials for eHarmony so it was victimuser2626. I hit the

2   tab button, which actually logs the keystroke with the tab

3   button, and then I wrote "this is my" messed up the spelling

4   and I actually hit backspace, which records that, and

5   "password." So I was attempting to write in "this is my

6   password," and it captured not only "this is my password" but

7   me backspacing when I hit the wrong button.

8   Q. To be clear, by "credentials," you mean username and

9   password, correct?

10   A. Yes.

11   Hit play, please.

12   So here's another screen capture of the Yahoo! page

13   after I logged in successfully.

14   So here's when I went to the Gmail site and typed in

15   my username and password, which also captured right over here.

16   What is effective about keyloggers like this is that

17   if the person were to change their password on their machine,

18   no matter how many times they did it, the purchaser of the

19   software would always know the new password because they would

20   receive these updates continuously.

21   Here's the screen grab from the family photos Bing

22   search that I did, which captured everything that was on the

23   screen at the time.

24   I think that's it.

25   Q. Thank you.

1   MR. HOWARD: No further questions.

2   THE COURT: All right. Thank you.

3   Mr. Dratel.

4   MR. DRATEL: One moment, your Honor.

5   CROSS-EXAMINATION

6   BY MR. DRATEL:

7   Q. Special Agent D'Agostino, when did you create the video?

8   A. Within the last week or so.

9   MR. DRATEL: Nothing further, your Honor.

10   THE COURT: All right. Thank you.

11   You may step down, sir.

12   (Witness excused)

13   MR. HOWARD: The government calls Mr. Ilhwan Yum.

14   THE COURT: Why don't we get Mr. Yum onto the stand,

15   but why don't we take our mid-morning break just before we have

16   Mr. Yum come in. So even though we've only been going for an

17   hour and then we'll go until lunch.

18   So, ladies and gentlemen, I want to remind you to

19   continue not to talk to each other or anybody else about this

20   case. Thank you very much.

21   And if you are using -- one more thing. If you are

22   using these breaks as an opportunity to check media or read the

23   newspaper or anything like that, I want to make sure I remind

24   you to avoid looking at any media. If you see anything that is

25   an article or otherwise references this case, you are to turn

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1   your eyes away. Do not read it.

2   All right. Thank you.

3   THE CLERK: All rise as the jury leaves.

4   (Continued on next page)

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1   (Jury not present)

2   THE COURT: All right. Is there anything that you

3   folks would like to go over before we take our own break?

4   MR. HOWARD: Not from the government, your Honor.

5   MR. DRATEL: No, your Honor.

6   THE COURT: All right. So let's just try to cabin it,

7   Joe, just sort of make it like a 7- or 10-minute break, Joe, if

8   that possible.

9   (the Court conferred with the Deputy Clerk)

10   THE COURT: About ten minutes. Thank you.

11   THE CLERK: All rise.

12   (Recess)

13   (Continued on next page)

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F1tgulb3   Yum – direct

1   (In open court; jury present)

2   THE COURT: We have called Mr. Yum to come to the

3   stand.

4   Swear the witness.

5   (Witness sworn)

6   THE COURT: Mr. Yum. Please be seated, sir. And it

7   will be important for you to adjust your chair and microphone

8   and speak clearly and directly into the mic.

9   Mr. Howard.

10   MR. HOWARD: Thank you.

11   ILHWAN YUM,

12   called as a witness by the Government,

13   having been duly sworn, testified as follows:

14   DIRECT EXAMINATION

15   BY MR. HOWARD:

16   Q. Good morning, Mr. Yum.

17   A. Good morning.

18   Q. Where do you work?

19   A. FTI Consulting, that's "T" as in technology.

20   Q. And back in 2013, where did you work?

21   A. FBI, the Federal Bureau of Investigation.

22   Q. And back then, what was your position with the FBI?

23   A. Special agent.

24   Q. And where were you based?

25   A. New York office.

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1   Q.   Were you assigned to a particular squad at the time?

2   A.   Yes. I was assigned to Squad CY2 which handled

3   cybercriminal intrusion matters.

4   Q.   And how long were you a member of that cybersquad?

5   A.   About five and-a-half years.

6   Q.   Now, while you were working as a cyberagent at the FBI, did

7   you have any experience searching computer servers?

8   A.   Yes, I did.

9   Q.   What is a computer server?

10   A.   It's nothing different than a regular computer but it's

11   dedicated to run services online, services like web pages,

12   email servers and anything else that you do online.

13   Q.   Approximately how many servers did you search during the

14   course of your career as an FBI agent?

15   A.   About 50 or more.

16   Q.   Were you involved in the Silk Road investigation?

17   A.   Yes, I was.

18   MR. HOWARD: Mr. Evert, can you please publish

19   Government Exhibit 264, which is already in evidence.

20   Q.   Now, Mr. Yum, during your involvement in the Silk Road

21   investigation, did you review files recovered from the

22   defendant's laptop?

23   A.   Yes, I did.

24   Q.   Are you familiar with this file?

25   A.   Yes, I am.

1   Q.   What is this file generally?

2   A.   It appears to be a list of computer servers and details and

3   descriptions about those computer servers.

4   MR. HOWARD: Mr. Evert, can we zoom in on the top

5   here, about halfway through the page.

6   Q.   Here we have one that the alias is listed as gala, ggb; the

7   notes column says backup and the IP address says 207.106.6.25.

8   Q.   Are you familiar with that server?

9   A.   Yes, I am.

10   Q.   And how are you familiar with that server?

11   A.   I obtained a warrant to search and seize this server back

12   in September 2013.

13   Q.   Directing your attention to September 9 of 2013, were you

14   involved in an execution of the search warrant on that server

15   on that date?

16   A.   Yes, I was.

17   Q.   Now, where was this server physically located?

18   A.   The server was physically located at a data center that was

19   about 30 minutes in the suburbs of Philadelphia.   Yes,

20   Philadelphia.

21   Q.   And did you go to where it was physically located?

22   A.   Yes, I did.

23   Q.   Now, what was the first thing you did after you arrived at

24   the location where the server was located?

25   A.   So, that day, I went to the data center with computer

1 scientist Thomas Kiernan. And when we arrived there, it looks

2 like a warehouse but inside, it's clean. It has security

3 doors. We were greeted by the administrator of the data

4 warehouse, data center, and he -- I had called ahead and

5 prearranged so that he was expecting us. And then upon

6 identifying myself, he took us to the rack space where the

7 server was located.

8 Q. And what do you mean by "rack space"?

9 A. It's a metal frame structure in a data center. It's

10 metal-framed -- rows and rows of metal frames, and each one of

11 those frames contains a bunch of computers that are mounted on

12 to it.

13 Q. And what did you do after you arrived at the location at

14 the rack space where the server was located?

15 A. First thing I did was I looked at the outside of the server

16 to make sure I had the right server, and I noticed a sticker

17 that was attached to it, which had the IP address, same thing

18 here, 207.106.6.25, and I was assured that I had the right

19 server that I was looking for.

20 Q. Could you flip to what's been marked for identification

21 purpose in your binder as Government Exhibit 602.

22 A. I don't have a binder in front of me.

23   MR. HOWARD: May I approach.

24   THE COURT: Mr. Howard will have some binders for you.

25   MR. HOWARD: Sorry about that.

1   THE COURT: That's all right.

2   THE WITNESS: Thank you.

3   Q. Now, that you have the binder, could you please flip to

4   Government Exhibit 602.

5   A. Yes.

6   Q. Do you recognize Government Exhibit 602?

7   A. Yes, I do.

8   Q. What is it?

9   A. It's the picture I took of the server on that date using my

10   FBI Blackberry.

11   MR. HOWARD: The government offers Government

12   Exhibit 602.

13   MR. DRATEL: No objection, your Honor.

14   THE COURT: Received.

15   (Government's Exhibit 602 received in evidence)

16   MR. HOWARD: Mr. Evert, could you actually leave 264

17   on the top half of the screen and zoom into the same line we

18   were looking at, and then put 602 on the bottom of the screen,

19   please.

20   Q. Mr. Yum, this sticker was what you just testified about

21   with the description of the server?

22   A. Yes, it is.

23   Q. The IP address, the address that matched with what was

24   listed on the defendant's -- the spreadsheet on the defendant's

25   computer, correct?

1   A.   Correct.

2   Q.   And here it says ggb on the sticker. Is that also found on

3   the spreadsheet that was located on the defendant's computer?

4   A.   Yes, it is.

5   Q.   So after taking the photograph and confirming that this was

6   the right server, what did you do next?

7   A.   So, the data center prepared a separate room for us.

8   There's hundreds of computers in there, so with the fan noise

9   is extremely loud to work in there. So we turned the computer

10   off and removed the hard drive from the computer and we took it

11   to that designated work area where we began making a forensic

12   copy of the server.

13   Q.   And what did you do to make a forensic copy?

14   A.   For this instance, we used a small device that's

15   preconfigured to make the job a lot easier for us, so this

16   device, what it does is, you plug in the hard drive that you

17   want to copy, and it's preconfigured where it's

18   write-protected, it's read-only, so you can't alter anything on

19   the original hard drive. And on the other side, you plug in

20   another hard drive that you want to make the copy onto.

21   Q.   By the way, what do you mean by forensic copy?

22   A.   Forensic copy is an exact bit-by-bit copy of any data out

23   of a hard drive so that you have a true, accurate image of

24   anything that you want to copy.

25   Q.   Now, after you make the forensic copy, do you do anything

1 to verify that it's an identical and accurate copy of the

2 original server?

3 A. Yes, I do. So in the forensic industry, we do hashing. In

4 this case, we did MD5 Hash and a SHA1 hash. And basically it's

5 an algorithm that calculates through a massive set of data and

6 you get a simple -- it's not really simple -- it's a long

7 string but much simpler than the entire data that you're

8 looking at. And it serves as a condensed fingerprint of what

9 you're looking at and it's a one-way algorithm. You can't

10 alter it. The original always gives you the same value.

11 Q. So if one bit of data got changed during the copy process,

12 what would have happened to the hash value?

13 A. So you get a different answer, different hash of the data

14 you calculated. So if you change anything, you get a different

15 hash value.

16 Q. And after you imaged -- made a forensic copy of this server

17 located outside of Philadelphia, did you compare the hash

18 values?

19 A. Yes, I did.

20 Q. What did you discover?

21 A. I noted that the original hard drive hash and the copy that

22 I made had the same hash value and they matched.

23   MR. HOWARD: May I approach.

24   THE COURT: You may.

25 Q. So Mr. Yum, I just handed you what's been marked for

1 identification purposes as Government Exhibit 604. Do you

2 recognize what this is?

3 A.   Yes, I do.

4 Q.   And what is it?

5 A.   It's the copy that I made of that server at the data

6 center.

7 Q.   How do you recognize it?

8 A.   I recognize it by the labeling that's on the hard drive

9 that we -- I made on the day the copy was made; and it also

10 matches -- the serial number hard drive matches what I wrote

11 down when I checked this batch -- checked this into FBI

12 evidence.

13   MR. HOWARD: The government offers Government

14 Exhibit 604.

15   MR. DRATEL: No objection.

16   THE COURT: Received.

17   (Government's Exhibit 604 received in evidence)

18 Q.   Mr. Yum, can you please flip in your binder to what's been

19 marked for identification purposes as Government Exhibit 604A.

20   Do you recognize what this is?

21 A.   Yes, I do.

22 Q.   And what is this?

23 A.   It's the log file that gets generated when you used the

24 device that makes the forensic copy.

25 Q.   Were you involved in generating this log file?

1   A.   Yes.

2   Q.   And it's the log file for this server, Government

3   Exhibit 604?

4   A.   Yes, it is.

5   MR. HOWARD: The government offers government

6   Exhibit 604A.

7   MR. DRATEL: No objection.

8   THE COURT: Received.

9   (Government's Exhibit 604A received in evidence)

10   MR. HOWARD: Now, Mr. Evert, can we just zoom into

11   this section here.

12   Q.   Briefly, Mr. Yum, here it says source hash SHA1 and MD5 and

13   to the right of SHA1 and MD5, there are these long string of

14   characters, numbers and letters.

15   What are those?

16   A.   Those are the corresponding hash values.

17   Q.   The hash values for what specifically?

18   A.   Oh. For the server that came -- for the hard drive that

19   came out of the server.

20   Q.   And then right below that, there's a verification hash,

21   SHA1, MD5 and again, long strings of numbers and letters to the

22   right.

23   What does this represent?

24   A.   So that's the hash value of the image, the copy that I

25   made.

1   Q.   And do they match?

2   A.   Yes, they do.

3   Q.   What did you do with the forensic copy of the drive,

4   Government Exhibit 604, after you made the copy?

5   A.   I brought it back to FBI New York and I checked it into

6   evidence.

7   Q.   Now, had you been involved in a review of the contents of

8   the server?

9   A.   Yes, I had.

10   Q.   And generally, what have you found that server to contain?

11   A.   Accurate to the description on the first spreadsheet that

12   was displayed, it contained what appeared to be backup files of

13   Silk Road Marketplace.

14   MR. HOWARD: Now, Mr. Evert, could you please publish

15   Government Exhibit 264 again, the server spreadsheet, and focus

16   a little high real on the lines that begin with the words "BTC"

17   and "bora." Go halfway down.

18   Q.   Mr. Yum, here we have the top row says bora and it

19   indicates an IP address of 193.107.86.49. Under the location

20   column it says Iceland. And in the notes column it says market

21   backhand. Is that correct?

22   A.   Correct.

23   Q.   And on the line under it, it says BTC in the left-most

24   column. The IP address is 193.107.86.34. The location is

25   listed as Iceland. And the notes column says live wallets and

1   in parentheses archive wallets. Correct?

2   A. Correct.

3   Q. Are you familiar with these two servers which are labeled

4   as being located in Iceland?

5   A. Yes, I am.

6   Q. How are you familiar with that?

7   A. Those are the two servers that I searched and

8   seized -- assisted in searching and seizing with the Iceland

9   police back in October of 2013.

10   Q. Was that on or about October 2, 2013?

11   A. Yes.

12   Q. So taking you to October 2, 2013, what initiated the start

13   of your seizure of these servers?

14   A. So, the plan was to wait for the team that's on-ground in

15   San Francisco, the FBI arrest team, and wait for them to give

16   me a confirmation that the defendant has been arrested. The

17   reason why we went with that tactic was we wanted to make sure

18   if I touch -- if I altered anything on these servers prior to

19   defendant being arrested, I was afraid that it was going to tip

20   off that there was some kind of law enforcement action.

21   Q. So where were these servers physically located?

22   THE COURT: Which servers are you talking about?

23   Q. We're both -- were these servers located in different

24   locations or were they in the same facility?

25   A. The same facility.

1   THE COURT: These are the Iceland servers?

2   MR. HOWARD: Yes.

3   Q. And where in Iceland was it located?

4   A. It was, again, hosted or located at a data center in

5   Iceland.

6   Q. Did you go to the facility?

7   A. Yes, I did.

8   Q. What was the first thing you did after you arrived at the

9   facility where these two servers were located?

10   A. So, we arrived at the data center with Icelandic police

11   officers. And, again, we were greeted by the data center

12   administrator and he was notified by the Icelandic police that

13   we were on our way. So when we identified ourselves, he took

14   us to the location, the server rack location where the servers

15   were found in the data center.

16   Q. Which server did you go to first?

17   A. The first one we seized was the market backhand up there.

18   It's listed as IP address 193.107.86.49.

19   Q. Now, once you arrived at where the server was located in

20   the facility, what could you tell about how the server was

21   configured?

22   A. So, again, we examined the computer server first and we

23   noticed that the way the server was set up had two hard drives

24   that were written to -- identically at the same time.

25   So the reason why is anybody runs a server this way is

1   you have two identical hard drives and if one of them fails,

2   the other one could take over and the website would never go

3   down.

4   Noting that, we turned the server off and we took one

5   of the hard drives as the true, best original evidence at that

6   point.

7   Q. Now, were you doing anything to monitor the Silk Road

8   website as this was occurring?

9   A. Yes. So when we went into the data center, I had a

10   separate laptop that was configured to use Tor and I had gone

11   to the Silk Road website on Tor. And prior to turning the

12   server off to seize the hard drive, I was able to view the

13   contents of Silk Road Marketplace on Tor.

14   When I turned the computer off to take the hard drive,

15   the Tor -- the Silk Road website on Tor was no longer

16   accessible. And once removing the second hard drive, I needed

17   to turn the computer -- the server back on; and soon after, I

18   was able to access the Silk Road website again.

19   Q. Now, why did you turn the Silk Road Marketplace back on?

20   A. So there were two phases to the approach that we took that

21   day. The first thing, after seizing the hard drive, the first

22   thing we needed to do -- the next thing we needed to do was to

23   seize the bitcoins on the other server listed there with IP

24   address 193.107.86.34.

25   Q. Now, how did you know the bitcoins were located on that

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1   server?

2   A.   So, if you recall back, the backup server that I seized in

3   Philadelphia back in September, the month prior, I noticed that

4   there were programs in there that indicated that Marketplace

5   was set up with the bitcoins being at a different location to

6   separate the two; and we knew that there was another server

7   containing all the bitcoins related to the Silk Road

8   Marketplace.

9   Q.   Was this code that was located on the backup server itself

10   that referenced the bitcoin server?

11   A.   Yes.

12   Q.   And did it specify the IP address of the bitcoin server?

13   A.   Yes, it did.

14   Q.   So how did you withdraw -- why did you have to keep --

15   THE COURT: Let me ask, when you say that the

16   Philadelphia server specified the IP address of the bitcoin

17   server, is that equivalent to saying that the Philadelphia

18   server specified the IP address of the server located in

19   Iceland?

20   THE WITNESS: Correct.

21   THE COURT: Thank you.

22   You may proceed.

23   Q.   You said that you put the Marketplace back online with

24   one -- there were two -- sorry. Let me step back.

25   You said there were two hard drives that operated the

1   server for the Silk Road Marketplace, correct?

2   A. Correct.

3   Q. And you took one of the two hard drives as evidence for the

4   case, correct?

5   A. Yes.

6   Q. And then you turned the server back on with one of the hard

7   drives in place because you said you had to seize bitcoins?

8   A. Right.

9   Q. Can you explain why you needed to turn the Marketplace back

10   on in order to do that.

11   A. So, again, we didn't want to alert the users of Silk Road

12   Marketplace that their bitcoins are being seized, so as I

13   mentioned before, the bitcoins in the Marketplace were

14   separated and the Marketplace had a program that reached out to

15   the bitcoin server to get the current balance and it would

16   update every five minutes or periodically.

17   And in order for me to seize all the bitcoins, I

18   needed to leave the Marketplace remaining online, but I

19   discontinued that update process so the balance was stuck at

20   the last known amount. And as I was seizing the bitcoins, the

21   users wouldn't be aware that the balance of the bitcoins on

22   Silk Road was depleting.

23   Q. And how did you actually seize the bitcoins? What did you

24   do?

25   A. So prior to going over to Iceland, I created a bitcoin

1   address that was dedicated for the government to seize and

2   transfer and receive the bitcoins that came out of Silk Road

3   Marketplace.

4   Q. And how did you move them from the bitcoin server in

5   Iceland to the FBI address?

6   A. I logged onto the Silk Road bitcoin server and executed

7   instructions to move that -- to make that transfer happen.

8   Q. Approximately how much did you move over to the FBI?

9   A. On that day of October 2, it was a little over 20,000

10   bitcoins.

11   Q. What was the approximate value in U.S. dollars that day?

12   A. There's different bitcoin prices at different indices, so I

13   would say approximately depending on the price that you used

14   before 16- to $18 million. Oh. Wait. I'm sorry. Let me go

15   back and do my math.

16   Q. You said there were 20,000?

17   A. Oh, 2- to $3 million.

18   Q. Now, earlier you said that there were two reasons that you

19   had to turn the Marketplace back up. One reason was to seize

20   the bitcoins, correct?

21   A. Correct.

22   Q. And prevent the balance from being updated so that users

23   wouldn't know the bitcoins were being seized, correct?

24   A. Yes.

25   Q. What was the other reason that you had to turn the

1   Marketplace back on?

2   A. So the last part of seizing these servers, we did want to

3   make a statement that the U.S. Government had seized and taken

4   over Silk Road Marketplace, so using the Marketplace

5   infrastructure, we had replaced the contents of the Silk Road

6   Marketplace and replaced it with a picture showing the

7   government seized Silk Road Marketplace.

8   Q. Could you please look in your binder to what's been marked

9   for identification purposes as Government Exhibit 600, please.

10 What is this?

11 A. It's a picture that I created based on a template that was

12 provided to me to place it on the Silk Road website once the

13 seizure was completed.

14   MR. HOWARD: The government offers Government

15 Exhibit 600.

16   MR. DRATEL: No objection.

17   THE COURT: Received.

18   (Government's Exhibit 600 received in evidence)

19 Q. Mr. Yum, this was the seizure banner that replaced the

20 contents of the Silk Road homepage. Is that correct?

21 A. That's correct. Another thing that I want to note here is

22 just like when I first turned the computer off, I was

23 monitoring the Silk Road website, and prior to putting this

24 picture up, I needed to turn the web server off. And I noticed

25 on my laptop I was no longer able to access Silk Road

1   Marketplace. And once I swapped the files and put this back

2   on, I turned the web server back on, and on my separate laptop

3   on my Tor browser, the Silk Road Marketplace that wasn't

4   accessible was now showing this page.

5   Q. So instead of the Silk Road homepage, you would get the

6   seizure banner, right?

7   A. Correct.

8   Q. Could users that go to the Silk Road then do transactions

9   on the Silk Road once you'd put that up on the website?

10   A. No. They would be stopped at that screen.

11   Q. Now, did you also seize the bitcoin server?

12   A. Yes, I did.

13   Q. The second server in Iceland?

14   A. Yes.

15   Q. First, let's focus on what you did on the Marketplace

16   server.

17   A. Sure.

18   Q. What did you do with the market -- you said you took one

19   hard drive from there?

20   A. Yes.

21   Q. What did you do with that after you took it?

22   A. I brought it back to New York and then I made a working

23   copy out of that and checked the original hard drive into

24   evidence.

25   MR. HOWARD: Your Honor, may I approach.

1   THE COURT: You may.

2   Q. Mr. Yum, I'm showing you what's been marked for

3   identification purposes as Government Exhibit 603. Do you

4   recognize what this is?

5   A. Yes, I do.

6   Q. And what is this?

7   A. It's the original -- one of the original hard drives that

8   came out of the Silk Road Marketplace server.

9   Q. Is that the server that you had previously identified as

10   having the IP address 193.107.86.49?

11   A. Yes, it is.

12   Q. How do you recognize that?

13   A. I recognize this because the server -- some of the server

14   hard drives they look different than a normal computer hard

15   drive, so it's a little different than what I normally see. So

16   I recognize it just by the physical appearance, but also the

17   serial number that was marked on it matches my form that I

18   filled out when I checked it into evidence.

19   MR. HOWARD: And the government offers Government

20   Exhibit 603.

21   MR. DRATEL: No objection.

22   THE COURT: Received.

23   (Government's Exhibit 603 received in evidence)

24   Q. Could you please look in your binder to what's been marked

25   for identification purposes as Government Exhibit 603A. Do you

1   recognize this exhibit?

2   A. Yes, I do.

3   Q. What is it?

4   A. It's the log file that was generated after I made a working

5   copy from this original hard drive.

6   Q. Did you make the copy in a similar manner as to the way you

7   copied the server in Philadelphia?

8   A. Yes. I used a similar device.

9   Q. And does this log file -- were you involved in generating

10   this log file?

11   A. Yes, I was.

12   MR. HOWARD: Government offers Government

13   Exhibit 603A.

14   MR. DRATEL: No objection.

15   THE COURT: Received.

16   (Government's Exhibit 603A received in evidence)

17   MR. HOWARD: Zoom in on the bottom section.

18   Q. Mr. Yum, here is another MD5 and SHA1 hash of the working

19   copy that you made?

20   A. Yes.

21   Q. Now, this log file only has one MD5 and one SHA1. Can you

22   explain that?

23   A. Yes. So I have the original which I can always go back and

24   confirm that what I have is what I took. And any time I'm

25   making a copy of this, that device that I'm using, that is

F1tgulb3   Yum - direct

1   write-protected so it can never be altered. And if it ever

2   gets altered, you could tell right away.

3   So this is the hash value for MD5 and SHA1 that was

4   calculated for the image that I created. So anyone else who is

5   working on this image afterwards, they could be assured that

6   the copy hasn't been altered since it was first made.

7   Q. And does anything in this document indicate whether the

8   copy was an accurate copy of the original?

9   A. Yes. Right above the highlighted section it says total

10   errors which is zero, and the copy was completed without any

11   problem.

12   Q. Now, were you also involved in seizing the bitcoin server

13   in Iceland?

14   A. Yes.

15   Q. How was that server configured?

16   A. I believe that one had a hard drive that was in there and

17   after seizing all the bitcoins, at that time I turned it off

18   and I seized the hard drive that was on the server.

19   Q. What did you do with that hard drive?

20   A. I also brought that back to FBI New York.

21   MR. HOWARD: Your Honor, may I approach the witness.

22   THE COURT: You may.

23   Q. Mr. Yum, I'm showing you now what's been marked for

24   identification purposes as Government Exhibit 605. Do you

25   recognize this exhibit?

F1tgulb3   Yum - direct

1   A. Yes, I do.

2   Q. And what is it?

3   A. It's the original hard drive that came out of the bitcoin

4   server.

5   Q. How do you know that?

6   A. Again, I recognize it by the physical appearance of the

7   hard drive itself. More importantly, the serial number

8   matched -- the serial number on the hard drive matches the form

9   that I used to check it into evidence.

10   Q. You called it the bitcoin server. Is that the server you

11   testified earlier had the IP address of 193.107.86.34?

12   A. Yes, it is.

13   Q. And how did you make a copy of this one?

14   A. I used the similar device that I had used previously with

15   the Marketplace server.

16   Q. Did you also verify that it was an accurate copy based on

17   hash values?

18   A. Yes.

19   Q. Both the MD5 and the SHA1?

20   A. Yes. I generated the MD5 and the SHA1 and verified that

21   there were no errors triggered when the copy was made.

22   Q. Could you please take a look at Government Exhibit 605A,

23   please. Do you recognize what this is?

24   A. Yes, I do.

25   Q. What is this?

F1tgulb3   Yum - direct

1   A.   This is the log file that was generated once the bitcoin

2   server hard drive was copied.

3   Q.   Were you involved in imaging and creating this log file?

4   A.   Yes, I was.

5   MR. HOWARD: The government offers Government

6   Exhibit 605A.

7   MR. DRATEL: No objection.

8   THE COURT: Received.

9   And did you offer 605?

10   MR. HOWARD: If I didn't, I mean to offer it now.

11   MR. DRATEL: No objection.

12   THE COURT: Received.

13   (Government's Exhibits 605, 605A received in evidence)

14   MR. HOWARD: Mr. Evert, zoom in on the bottom section.

15   Q.   Again, is this where the MD5 and SHA1 hash values are

16   located, Mr. Yum?

17   A.   Yes, it is.

18   Q.   And does this also indicate that there were no errors, it

19   was made successfully and that the copy was a true and accurate

20   copy of the original?

21   A.   Yes.

22   Q.   What did you do after you made a copy of the bitcoin

23   server?

24   A.   I checked it into evidence.

25   Q.   Now, earlier you testified that you were involved in

1 putting up the seizure banner on the Silk Road Marketplace

2 server, correct?

3 A. Correct.

4 Q. Are you familiar with setting up websites to run on the Tor

5 network?

6 A. Yes, I am.

7 Q. Mr. Yum, could you please flip in your binder to what's

8 been marked for identification purposes as Government

9 Exhibit 106D. Do you recognize what this is?

10 A. Yes. It appears to be a simplified diagram of how the Tor

11 network operates.

12 Q. Would this aid your testimony today?

13 A. Yes.

14   MR. HOWARD: The government offers 106D for

15 demonstrative purposes.

16   MR. DRATEL: No objection.

17   THE COURT: Received.

18   (Government's Exhibit 106D received in evidence)

19   THE COURT: For demonstrative purposes.

20 Q. Mr. Yum, here we have a diagram of the Tor network,

21 correct, simplified diagram?

22 A. Yes.

23 Q. And so, what is required to put -- and right here we have a

24 web server hidden service, right?

25 A. Correct.

F1tgulb3   Yum - direct

1   Q.   What is required to put a website on the Tor network?

2   A.   The first and most important thing is you need to know how

3   to run a website first, how to run a web server. Once you know

4   how to do that, if you also know how to use Tor technology, all

5   you need to do is change a couple of lines of code and it's

6   almost plug and play. Everything is handled by Tor itself and

7   your web server is no longer accessible on the Internet but

8   only through Tor.

9   Q.   Mr. Yum, to be clear, do you need to understand anything

10   about what's going on inside the Tor network?

11   A.   No. You don't need to understand how exactly Tor works.

12   Q.   That's done for Tor for you?

13   A.   Right. All the actual transmission back and forth is

14   handled by how Tor is designed.

15   Q.   Now, are instructions available for how to set up a Tor

16   hidden service?

17   A.   Yes, they are.

18   Q.   Where are they located?

19   A.   On the main Tor project page, as well as some other users

20   have their own instructions as well.

21   Q.   Now, Mr. Yum, do you have any experience with bitcoins?

22   A.   Yes, I do.

23   Q.   Have you engaged in any bitcoin transactions?

24   A.   Yes, I have.

25   Q.   And approximately how many?

F1tgulb3   Yum – direct

1   A.   I would say hundreds of bitcoin transactions.

2   Q.   Including the bitcoin transactions you talked about

3   earlier, you seized bitcoins?

4   A.   Correct, for the government seizure of bitcoins as well.

5   Q.   What are bitcoins?

6   A.   Bitcoins are -- it's digital currency. It's money that

7   works online to buy products online or even in real person or

8   paid-for services. It's kind of like cash for the Internet.

9   It's similar to cash in that when people conduct transactions,

10   you don't really see who is doing the transactions, but it's

11   different than cash that every single transaction, the

12   transaction itself, it gets permanently documented on this

13   thing called the block chain. So even though you don't know

14   who made the transactions, you get to see every single

15   transaction that was performed using bitcoins.

16   Q.   Can you explain the block chain a little more fully,

17   please.

18   A.   So block chain, in accounting terms it's similar to a

19   public ledger which means, you know, published financial

20   records of everything that's taking place. So block chain,

21   it's a file that's online on the Internet access and shared and

22   used by all the bitcoin users and what it contains is every

23   single transaction of bitcoins ever since the creation of

24   bitcoins.

25   Q.   Now, can bitcoins be used for legitimate purposes?

F1tgulb3   Yum - direct

1   A. Yes, they can.

2   Q. Can they also be used for illegitimate purposes?

3   A. Of course.

4   THE COURT: Let me ask about the block chain again.

5   I'm not clear what information is in the block chain.

6   In other words, I understand from your testimony that you can

7   follow that there has been a transaction, then another

8   transaction, then another transaction and you can follow the

9   transaction history of a particular bitcoin --

10   THE WITNESS: Right.

11   THE COURT: -- or a portion of bitcoin.

12   THE WITNESS: Yes.

13   THE COURT: What is the information in the block

14   chain?

15   THE WITNESS: So the information that's contained in

16   the block chain, first of all, you would have the information

17   about the block chain itself, so the size of the current block

18   and the date and the time that block was added to the block

19   chain, so it's constantly growing. I think the current size of

20   the block chain is over 20 gigabytes I think. So it's a

21   considerable size because it contains all the history of

22   bitcoins.

23   So within the block, there's additional information of

24   every single transaction that was added to that block, so

25   you'll see all the addresses that were used to send the payment

 1   and all the addresses that were used to receive a payment in

 2   bitcoins.

 3   THE COURT: IP addresses?

 4   THE WITNESS: There is no direct IP address of who is

 5   sending and receiving bitcoins.

 6   THE COURT: So what kind of address is it?

 7   THE WITNESS: I believe you might be able to obtain

 8   the IP address of --

 9   THE COURT: Don't speculate. I'm wondering when you

10   use the word "address," what were you referring to, what kind

11   of address.

12   THE WITNESS: Bitcoin addresses. So it's a long

13   string of alphanumeric value and it works almost like an email

14   address. You need to give somebody your bitcoin address in

15   order for whoever that wants to pay you to make sure they pay

16   you the correct amount of bitcoins to the right person.

17   So if I were to email Tim, I wouldn't know how to send

18   him an email until Tim gave me his email address. So in the

19   same manner, if I need to send Tim ten bitcoins, there's no way

20   for me to deliver those bitcoins to him unless he gives me his

21   bitcoin address first.

22   BY MR. HOWARD:

23   Q. Mr. Yum, let's skip ahead. We'll come back to where we

24   want to go next to show an example of a block chain. Look at

25   Government Exhibit 601, which is in your binder, please.

1   Do you recognize what this is?

2   A.   Yes, I do.

3   Q.   What is this?

4   A.   It's a screenshot of a popular block chain explorer,

5   blockchain.info. You could obtain information about the block

6   chain and transactions.

7   Q.   Is that website available to the public?

8   A.   Yes.

9   Q.   Were you involved in the preparation of this exhibit?

10   A.   Yes.

11   Q.   Does this exhibit fairly and accurately depict information

12   from the block chain?

13   A.   Yes, it does.

14   MR. HOWARD: Government offers Government Exhibit 601.

15   MR. DRATEL: No objection.

16   THE COURT: Received.

17   (Government's Exhibit 601 received in evidence)

18   Q.   Mr. Yum, this is something you could pull up in an ordinary

19   Internet processor, correct?

20   A.   Yes.

21   Q.   Let's focus on the top section.

22   A.   So the top section is a high-level summary about that

23   address.

24   Q.   So where is -- do you have your laser pointer up there?

25   A.   Yes, I do.

F1tgulb3   Yum – direct

1   Q.   Can you point to what a bitcoin address is?

2   A.   It would be the first line right there.

3   MR. HOWARD: Mr. Evert, can we zoom in on that for a

4   moment.

5   Q.   So it's this long string of numbers and letters, correct?

6   A.   Correct.

7   Q.   Earlier you gave the example of sending an email. You'd

8   need to know the email address of someone you're sending an

9   email to in order to send the email to them, right?

10   A.   Correct.

11   Q.   Is this what you would need to know from someone else if

12   you wanted to send them bitcoins?

13   A.   Right. That would be the address that I would need to send

14   the bitcoins to if I owed the owner of that address money or

15   bitcoins.

16   Q.   It's a long, ugly string of numbers and characters, right?

17   A.   Yes.

18   MR. HOWARD: Can we zoom out.

19   Q.   What other information is there at the top here?

20   A.   On the right side, it has the history of that bitcoin

21   address. So that bitcoin address was used in six different

22   transactions and it received a total of 7,225 bitcoins and the

23   final balance is zero. So all of those bitcoins that were

24   received to that address has afterwards been sent to somewhere

25   else.

1   MR. HOWARD: Can we zoom out, please.

2   Q.   What does this section of the report include?

3   A.   That would be the detailed transaction of that summary that

4   was mentioned above, the six transactions.

5   Q.   Would that be all the transactions that were associated

6   with that address?

7   A.   Yes.

8   Q.   Let's focus on the bottom one for an example.

9   Can you describe how this depicts information about a

10 bitcoin transaction.

11 A.   Yes. So I'll go from the top right first. So that long

12 string of alphanumeric value there, that is a transaction ID.

13 So on the block chain, every transaction is tagged with a

14 unique ID that only represents one unique transaction. So with

15 that transaction ID, you know this transaction happened.

16   On the block, you also get a timestamp over there,

17 which was -- the transaction occurred in March 31, 2013 and

18 below it on the body of this transaction detail, you see the

19 four addresses on the left. Those four addresses together sent

20 1,670 bitcoins to that address on the right.

21 Q.   To be clear, it's 1,670 bitcoins in total across all four

22 of those addresses?

23 A.   Yes.

24 Q.   To the one address on the right, correct?

25 A.   Yes.

F1tgulb3   Yum - direct

1   Q. So if someone has a bitcoin address, like the one on the

2   right, this is information they can just pull up on a public

3   website, correct?

4   A. Correct.

5   Q. If you have the unique transaction number, could you also

6   pull up all these transaction details on a public website?

7   A. Yes.

8   MR. HOWARD: Now, can we zoom out, please.

9   Q. So now if you have the bitcoin address, this is the report

10   you can get that's publicly available, right?

11   A. Right.

12   Q. Does the report include any information about who -- the

13   identity of the person who owns the bitcoin address?

14   A. No, it doesn't. So you would only get the information what

15   you see up there. If you were the actual party in that

16   transaction, you could -- if you know who sent you the money,

17   you could kind of -- you could tie in -- certain addresses

18   might belong to somebody. But other than that, the block chain

19   itself, you can't tell who is sending or receiving bitcoins.

20   Q. You would need information from somewhere else, correct?

21   A. Right.

22   Q. Not from the block chain itself?

23   A. Correct.

24   Q. Could you please flip in your binder to what's been

25   premarked for identification purposes as Government

1   Exhibit 608, please. Are you familiar with how the basics of a

2   bitcoin transaction works?

3   A.   Yes.

4   Q.   What is Government Exhibit 608?

5   A.   It is a simplified illustration to explain how a bitcoin

6   works.

7   Q.   Would this aid your testimony today?

8   A.   Yes.

9   MR. HOWARD: The government offers government

10   Exhibit 608 for demonstrative purposes.

11   MR. DRATEL: No objection.

12   THE COURT: Received for demonstrative purposes.

13   (Government's Exhibit 608 received in evidence)

14   Q.   Mr. Yum, could you please explain, what is a bitcoin

15   wallet?

16   A.   So a bitcoin wallet, it's a container that holds all the

17   bitcoin addresses relating to a person. So in this picture

18   here, we had Alice. Alice is using bitcoin and she has a

19   bitcoin program on her computer. That program creates a wallet

20   file and inside the wallet file, it contains all the addresses

21   that belong to Alice; as well as you could see the balances

22   that are inside each one of those addresses, but more

23   importantly, the wallet file contains -- and here, it has a red

24   key, but in bitcoin terms, it's called a private key. And what

25   private key allows is the user, Alice, to control and see all

F1tgulb3   Yum - direct

1   of the information about her bitcoins.

2   Q. What else does having the private keys allow you to do with

3   bitcoins?

4   A. So if you own any bitcoins in any one of these addresses,

5   the corresponding key allows you to spend those bitcoins.

6   Q. And the wallet is basically just a computer file, correct?

7   A. Yes. It's a computer file, yeah.

8   Q. Is Alice able to see all of her own addresses?

9   A. Yes.

10   Q. Just to be clear, on this demonstrative that we say BTC

11   Address 1 and down to 5.

12   How many addresses could a wallet contain?

13   A. As many as you want. In here for example purposes there's

14   only five addresses listed, but you could create hundreds,

15   thousands of addresses in one wallet file.

16   Q. Can anyone else other than Alice see all of the addresses

17   in her wallet?

18   A. Only if they know what the address is, but if you don't

19   have the private key, you can't just guess someone else's

20   address.

21   Q. To be clear, each those addresses is one of those long,

22   ugly string of numbers and letters, right?

23   A. Correct.

24   THE COURT: Where do you get an address?

25   THE WITNESS: So, the bitcoin program generates a long

1   string of numbers and that acts as a seed to the private key.

2   And the program again uses that private key to calculate

3   something that is similar to the MD5 hashes and a hash value is

4   represented as a public key which is a lot easier to pass to

5   someone else, although it looks very long and confusing.

6   THE COURT: All right.

7   Q.   How easy is it to create a new bitcoin address?

8   A.   If you're using a bitcoin program all you have to do is

9   click a button and request the program to create a new bitcoin

10   address.

11   Q.   It will assign a new bitcoin address to you?

12   A.   Yes.

13   Q.   Will it give you the private key necessary to spend the

14   bitcoins in that address?

15   A.   Right. In the background of the program, you'll get a

16   private key and then you'll get the public address that you can

17   freely give out to other people if you want to receive bitcoins

18   to that address.

19   Q.   Could you explain what is depicted on the second slide,

20   please.

21   A.   I'm going to walk you through a simplified demonstration of

22   how a transaction would occur. So, again Alice, she owes Bob

23   ten bitcoins, but just as I said, Alice has no idea where to

24   send the bitcoins to, so she needs to ask Bob for a bitcoin

25   address first.

F1tgulb3   Yum - direct

1   So Alice wants to send ten bitcoins and she's asking

2   where to send it to. And Bob, in his wallet, he only has two

3   addresses, but as stated before, he could have many more if he

4   wants to. So Bob picks his Bitcoin Address 2, and can we go to

5   the next screen, please, and tells Alice to send ten bitcoins

6   to Address 2.

7   Alice doesn't really need to worry about where the

8   bitcoins are coming from her wallet. The program handles that

9   in the most efficient manner it could, so once Alice tells her

10   bitcoin program to send ten bitcoins to Bob's Address 2,

11   Alice's program picks Address 1 and Address 4 in her wallet and

12   sends ten bitcoins to Bob's Address 2.

13   Q. So Alice doesn't have to pick and choose between her own

14   addresses, correct?

15   A. Right. It's very simple to use.

16   THE COURT: It could be five out of one address, five

17   out of another or two out of one address, eight out of another,

18   or some other combination of pieces?

19   THE WITNESS: Correct.

20   THE COURT: All right.

21   Q. So what's depicted on the third slide?

22   A. In our demonstration, there were seven bitcoins in Address

23   1 that was sent and three bitcoins in Address 4 of Alice's

24   bitcoin that were sent to Bob's Address 2 in the amount of ten

25   bitcoins.

1   Q.   And then what's reflected on the bottom of the slide?

2   A.   So the bottom would be an example of what would be recorded

3   onto the block chain as we saw in the prior block chain info

4   screenshot. So in here, you would see a unique transaction

5   number that identifies this particular transaction and the date

6   and time this transaction was documented onto the block chain.

7   And in here, again, you see only the two addresses

8   that were used to make this transaction of ten bitcoins that

9   were sent to Bob's Address 2.

10   Q.   So now Bob could get this information off the block chain

11   and see what addresses Alice's wallet used to engage in this

12   transaction, correct?

13   A.   Correct. Bob, he knows his address, so he could easily

14   search his own address and figure out this transaction and note

15   that Alice used these two bitcoin addresses to send Bob ten

16   bitcoins.

17   Q.   Now, would Bob know all of Alice's other bitcoin addresses?

18   A.   No. Address 2, 3 or 5, Bob would have no idea what

19   the -- who those addresses belong to.

20   Q.   And why couldn't he see those?

21   A.   The addresses aren't announced or anything. So unless you

22   directly have a transaction with somebody, you can't really

23   figure out who owns what address.

24   Q.   You need the private keys to see all the rest of the

25   wallet?

F1tgulb3   Yum - direct

1   A.   Right. The only way Bob may be able to see these addresses

2   is if he had the private key in his wallet allowing him to

3   calculate the same private address -- public address.

4   Q.   Now, Mr. Yum, earlier you testified that you seized

5   approximately 20,000 bitcoins from the Iceland bitcoin server,

6   correct?

7   A.   Correct.

8   Q.   Now, apart from that seizure, were you involved in any

9   other seizures of bitcoins in the Silk Road investigation?

10   A.   Yes, I was.

11   Q.   Where were those bitcoins located?

12   A.   The wallet file for the other bitcoins were obtained from

13   the laptop that was seized from the defendant on the day of his

14   arrest.

15   Q.   And how did you get access to that wallet file?

16   A.   So, Mr. Kiernan actually analyzed and reviewed the laptop

17   and he had located the wallet file and copied it onto a thumb

18   drive and handed it over to me.

19   Q.   And what did you do with that wallet file after it was

20   provided to you by Mr. Kiernan?

21   A.   So, I loaded that wallet file onto my bitcoin program

22   instance, and checked the current balance that was contained

23   inside all the addresses inside the wallet file.

24   Q.   And what was the balance?

25   A.   It was approximately 144,000 bitcoins.

F1tgulb3   Yum - direct

1   Q.   And what were those bitcoins worth approximately at the

2   time of the defendant's arrest?

3   A.   So at the time of the arrest, which was prior to when I

4   received that wallet file, it was -- again, using the varying

5   bitcoin price of that day, it would have been anywhere between

6   16- to $18 million.

7   Q.   Now, what did you do after you determined the balance of

8   the bitcoins that were in the wallet that was in the

9   defendant's computer?

10 A.   I had another bitcoin address that was prepared for the

11 government's seizure, and I transferred all the bitcoins from

12 the defendant's wallet file into the government address.

13 Q.   You said it was an FBI bitcoin wallet, correct?

14 A.   Correct.

15 Q.   Is this the same or different wallet that you used in

16 Iceland to get the bitcoins from the bitcoin server?

17 A.   Different address. I wanted to separate the two so the

18 bitcoins didn't mix.

19 Q.   Was there any balance in the FBI controlled log when you

20 created it?

21 A.   No. It was a newly -- brand new created bitcoin address

22 and since it's never been -- there's never been a transaction

23 conducted using that address, it wouldn't have shown in the

24 block chain, so no one else knew what that address was.

25 Q.   Now, did the wallet file that was provided to you by

F1tgulb3   Yum - direct

1   Mr. Kiernan from the defendant's laptop contain the private

2   keys for the bitcoin addresses in that wallet?

3   A.   Correct.   That would be the most important thing.   Without

4   those private keys, I wouldn't have the right to send the

5   bitcoins from the defendant's wallet to the government seizure

6   address.

7   Q.   Did those private keys also allow you to see all of the

8   bitcoin addresses that were located in that wallet?

9   A.   Yes.

10 Q.   Can you please flip in your binder to what's been marked

11 for identification purposes as Government Exhibit 607.   Do you

12 recognize what this is?

13 A.   Yes, I do.

14 Q.   And what is this?

15 A.   It's a screenshot of a search engine named duckduckgo, and

16 it's the search result for a bitcoin address starting 1FfmbH,

17 which is the address that I created for the government to seize

18 all of the bitcoins from the defendant's laptop.

19 Q.   And had you previously used this website to obtain public

20 information from the block chain?

21 A.   Yes, I have.

22 Q.   Does this website accurately reflect bitcoin transactions

23 that you've conducted in the past?

24 A.   Yes, it does.

25 Q.   You took this screenshot?

F1tgulb3   Yum - direct

1   A. Yes.

2   MR. HOWARD: The government offers Government

3   Exhibit 607.

4   MR. DRATEL: No objection.

5   THE COURT: Received.

6   (Government's Exhibit 607 received in evidence)

7   Q. Mr. Yum, right up here at the top next to the cute little

8   picture of the duck, there's 1Ff and a long string of

9   characters. What is this?

10   A. That's the address created for the government.

11   Q. The bitcoin address?

12   A. The bitcoin address, yes.

13   Q. And you were involved in creating that, correct?

14   A. Yes.

15   MR. HOWARD: Can we zoom out, please.

16   Q. Here it says total received, 144,341 and change. What does

17   that number represent?

18   A. So that's the total amount of bitcoins that was sent to

19   this address above.

20   Q. And where were they sent from?

21   A. So that total number is a little higher than the actual

22   amount, but the majority of those were sent from the

23   defendant's laptop -- the wallet file located in the

24   defendant's laptop.

25   MR. HOWARD: Mr. Evert, could you please publish

F1tgulb3   Yum - direct

1   Government Exhibit 201L, which is already in evidence.

2   Q.   Have you seen this before? It's on the screen.

3   A.   Yes, I have.

4   Q.   And what is this?

5   A.   It's a summary sheet. It's a picture screenshot of the

6   defendant's laptop when it was seized on the day of his arrest.

7   Q.   So I want to focus here on the fifth line down here. Can

8   we zoom in here. And here it says cold BTC and under that

9   144,336.4.

10   How does this number that was on the defendant's

11   computer screen compare to the number of bitcoins that you

12   seized?

13   A.   It matches almost exact to the amount that was seized.

14   Q.   And right above that, there's the word "cold BTC"?

15   A.   Yes.

16   Q.   Are you familiar with the bitcoin term "cold storage"?

17   A.   Yes, I am. It's a term that's commonly used within the

18   bitcoin community and bitcoin users.

19   Q.   What is it used to refer to?

20   A.   It's a way to store your wallet file. So it's important to

21   secure your wallet file because it has all the keys that allows

22   you to spend your bitcoins. So cold storage is -- the most

23   common example is not having your wallet file attached a

24   bitcoin program. So instead of -- that would be hot, so

25   instead of having a hot wallet, you have a cold storage where

F1tgulb3   Yum – direct

1   if you separate from a computer that's running a bitcoin

2   program, so even if the computer gets comprised or damaged or

3   if it fails, you still have your bitcoins secure and tucked

4   away in your cold storage.

5   Q. What does cold storage refer to with a bitcoin wallet with

6   respect to a website?

7   A. For a website, if you're running a website and if your

8   website crashes or if your website gets compromised, you don't

9   want to lose everything that's in there, so you create a cold

10   storage. And the idea would be to move all the important parts

11   or your bitcoins to cold storage so if anything ever happens to

12   the website, you don't lose your bitcoins.

13   Q. Now, Mr. Yum, earlier you testified that you are currently

14   working at FTI Consulting, correct?

15   A. Correct.

16   Q. What is your position?

17   A. Senior director.

18   Q. Now, in your capacity at FTI, have you recently been

19   involved in an analysis of bitcoin transactions related to the

20   Silk Road investigation?

21   A. Yes, I was.

22   Q. Now, are you being paid for your work with respect to that?

23   A. Yes, I am.

24   Q. And how much are you getting paid for that?

25   A. For this project, not myself directly, but my company is

F1tgulb3   Yum - direct

1   charging an hourly rate of $468.

2   Q. Did you work on this alone or did others at FTI assist you?

3   A.   I worked with one other -- one other person in my team.

4   Q. To be clear now, you got paid for the work you did on this

5   analysis, correct?

6   A.   Just on analysis.

7   Q. Are you being paid to testify today?

8   A.   No, I'm not.

9   Q. Now, what was the overall subject matter of your recent

10 work?

11 A.   I'm sorry --

12 Q. What is the overall matter of your recent work?

13 A.   I was asked by the government to see if there's any -- if

14 any at all link between the bitcoin addresses that were found

15 on Silk Road and the bitcoin addresses that were found on the

16 defendant's laptop.

17 Q. So let's break that down. Where were these bitcoin

18 addresses located?

19 A.   So, one side, we had the Silk Road bitcoins. I received

20 evidence items from the government and I reviewed the

21 Philadelphia server that was mentioned before, as well as the

22 bitcoin Marketplace -- the Silk Road Marketplace bitcoin

23 servers in Iceland and located -- examined and located,

24 identified all the bitcoin wallet files that were found on

25 those two servers.

F1tgulb3   Yum – direct

1   Q.   Those are two servers that you were actually personally

2   involved in seizing, correct?

3   A.   Yes, when I was still with the government.

4   Q.   Did you find the private keys on those servers for those

5   wallet files?

6   A.   Yes. So I obtained the wallet files, so I had all the

7   private keys that are also inside those wallet files.

8   Q.   So did that allow you to see all of the bitcoin addresses

9   that were associated with those wallets on the Silk Road

10   servers?

11   A.   Yes.

12   Q.   Now, how about the defendant's laptop?

13   A.   So, I took the same approach. I got a forensic image copy

14   of the defendant's laptop and I examined and analyzed the

15   laptop to locate at least three wallet files and extracted all

16   the bitcoin addresses there because I had the private keys that

17   were contained inside those wallet files.

18   (Continued on next page)

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F1tdulb4   Yum - direct

1   Q. Now, you testified that you examined -- you received

2   certain pieces of evidence from the FBI to perform this

3   analysis, correct?

4   A. Correct.

5   Q. So what pieces of evidence did you specifically receive?

6   A. I got three forensic images -- one of the Philadelphia

7   server, the backup server, one of the Iceland bitcoin server

8   that was seized over in Iceland, and an image of the

9   defendant's laptop, which was seized at the time of his arrest.

10 Q. So if you could please flip in your binder -- actually,

11 just real fast. After you received copies of those three

12 pieces of evidence, did you do anything to verify that they

13 were true and accurate copies of the original evidence?

14 A. Of course. I calculated my own MD5 and SHA1 hashes. I

15 calculated those two hash files to make sure my starting point

16 is the same as what was originally copied.

17 Q. So did you compare those MD5 and SHA1 hash values to the

18 ones that were originally generated for those pieces of

19 evidence?

20 A. Yes.

21 Q. What did you discovery?

22 A. They all matched.

23 Q. Could you please flip in your binder to what has been

24 marked as Government Exhibit 606, please.

25   How many pages is this exhibit?

1   A. Three pages in total.

2   Q. And what is it?

3   A. Each one of those pages are a screenshot that I made after

4   I calculated the hash values.

5   Q. Those are the hash values of each of the three pieces of

6   evidence that you received from the FBI?

7   A. Correct.

8   MR. HOWARD: The government offers Government Exhibit

9   606.

10   MR. DRATEL: No objection.

11   THE COURT: Received.

12   (Government's Exhibit 606 received in evidence)

13 Q. So each contains an MD5 and a SHA1, correct?

14 A. Correct.

15   MR. HOWARD: Just flip through the pages, Mr. Evert.

16 Q. And all of those values match the values on the various log

17 files we've seen today, correct?

18 A. Yes, they do.

19 Q. And also match the log file from the image of the

20 defendant's computer that you received from the FBI?

21 A. Yes.

22 Q. The laptop computer?

23 A. Yes.

24 Q. Could you please look in your binder to what has been

25 marked for identification purposes as Government Exhibit 609.

F1tdulb4   Yum – direct

1   Do you recognize this exhibit?

2   A.   Yes, I do.

3   Q.   And what is it?

4   A.   It's a simplified illustration of the work that I did to

5   compare all the addresses that was obtained from Silk Road

6   Marketplace and all the addresses that were obtained from the

7   defendant's laptop.

8   Q.   And would this aid your testimony today?

9   A.   Yes.

10   MR. HOWARD: The government offers Government Exhibit

11   609 for demonstrative purposes.

12   MR. DRATEL: No objection for demonstrative purposes.

13   THE COURT: 609 is received for demonstrative

14   purposes.

15   (Government's Exhibit 609 received in evidence)

16   BY MR. HOWARD:

17   Q.   Could you please explain what your analysis consisted of?

18   A.   Sure. So I examined the forensic copy of the defendant's

19   laptop and carefully went through the files and located three

20   Bitcoin Wallet files. Some of those wallet files may be

21   duplicates or used that one time and then switched over to a

22   different wallet, so there were some duplicates. But at the

23   end I sorted the addresses down to 11,135 unique individual

24   bitcoin addresses.

25   And this is possible because the wallet file contains

F1tdulb4   Yum - direct

1   the private key that I was talking about. So without the

2   private key I would not be able to extract all these addresses.

3   Q. The fact that the private keys were located on the

4   defendant's computer, what does that indicate?

5   A. It indicates the defendant's laptop, the wallet file,

6   controlled these bitcoin addresses. So these are the only keys

7   that could spend the bitcoins that are in these wallet files.

8   Q. So the user of the computer could spend the bitcoins in

9   those addresses?

10   A. Correct. And if we could go to the next page.

11   So from the other side, those are the two servers --

12   images of two servers that I obtained, one from the

13   Philadelphia backup server and one from the Iceland Silk Road

14   bitcoin servers. So from those two images, I carefully went

15   through them, examined it, and identified and located 22

16   Bitcoin Wallet files. Again, some of these might be backups or

17   an address that was used at one point and moved on to another

18   address. So initially I found over 10 million bitcoin

19   addresses. Some of them are duplicates, but I narrowed it down

20   to a little over 2 million unique bitcoin addresses.

21   Q. Go to the next page, please.

22   A. So now I have two sets of addresses, a set of over 2

23   million bitcoins that were found on servers that are related to

24   Silk Road Marketplace. And on the other side I had over 11,000

25   bitcoin addresses that were recovered from the laptop belonging

F1tdulb4   Yum - direct

1   to the defendant that was seized at the time of the arrest.

2   Q.   Sorry, how many address? 2,105,527 unique addresses?

3   A.   Yes. The exact number would be 2,105,527 addresses from

4   Silk Road Marketplace and 11,135 bitcoin addresses from the

5   defendant's laptop.

6   Q.   Go to the next page, please.

7   A.   Wait. Actually, can we go back one?

8   So I could explain using this screen and the next

9   screen, but the analysis that I did, I didn't do any

10   complicated analysis. I wanted to look for the most simple

11   direct link between those two sets of addresses. So I had the

12   addresses from the Silk Road Marketplace and I had the

13   addresses from the defendant's laptop, and I went back to the

14   block chain, which is publicly available and agreed by all the

15   bitcoin users, and identified all the transactions where the

16   money was being sent from Silk Road Marketplace and bitcoins

17   were received to the addresses on the defendant's laptop.

18   Q.   Are these direct one-to-one transactions?

19   A.   Direct one-to-one. It didn't skip over anywhere else. It

20   went straight directly from Silk Road Marketplace directly to

21   the addresses found on the defendant's laptop.

22   So if you could go to the next screen.

23   So just to give you an example of the raw information

24   that I had to work with, this is not the entire list but just a

25   portion of addresses from each side. So on the left you see

F1tdulb4   Yum – direct

1   all the addresses, the public addresses for Silk Road

2   Marketplace, and the unique list had over 2 million bitcoin

3   addresses and I could obtain these because of the private key

4   that was also inside the wallet files.

5   On the right side you have the laptop addresses in

6   there. These are the unique addresses, over 11,000 bitcoin

7   addresses that were found on the defendant's laptop and. I was

8   able to tell these because the wallet file contains the private

9   keys to generate these public addresses, which also allows the

10   owner of those private keys to spend those bitcoins.

11   MR. HOWARD: Your Honor, may I approach?

12   THE COURT: Yes.

13   Q. So I'm handing you what has been marked for identification

14   purposes as Government Exhibits 650 and 651.

15   Do you recognize what these are?

16   A. Yes, I do.

17   Q. And what are they?

18   A. Each one of theses discs contain the text file that you saw

19   a portion of just now.

20   Q. What are in those text files?

21   A. One of the text files contains all the addresses -- all the

22   unique list of addresses from the Silk Road Marketplace, and

23   the other disc contains all the unique addresses found on the

24   defendant's laptop.

25   Q. And just to be clear: I gave you two CDs. Which one is

1   which?

2   A.   Exhibit 650 is the Silk Road Marketplace bitcoins, and

3   Exhibit 651 is all the addresses that were found on the

4   defendant's laptop.

5   Q.   And how do you recognize these CDs?

6   A.   I was involved in the creation of these CDs.

7   Q.   And are your initials on them?

8   A.   Yes. After I created them, I initialed them and dated the

9   CDs.

10   MR. HOWARD: The government offers Government Exhibits

11   650 and 651.

12   MR. DRATEL: No objection.

13   THE COURT: Received.

14   (Government's Exhibits 650 and 651 received in

15   evidence)

16   MR. HOWARD: Your Honor, may I approach?

17   THE COURT: You may.

18   MR. HOWARD: So, Mr. Evert, could you please publish

19   Government Exhibit 650. Just bring it up in the text file

20   itself.

21   Q.   So, Mr. Yum, this the list of the two-million-plus unique

22   bitcoin addresses that were recovered from Silk Road-related

23   servers, correct?

24   A.   Correct.

25   MR. HOWARD: If you can scroll this to show how large

F1tdulb4   Yum - direct

1   this is.

2   (Indicating)

3   I think we get the idea.

4   Can we go to Government Exhibit 651, please.

5   Q. Mr. Yum, this is a list of the 11,000-plus unique bitcoin

6   addresses that were found on the defendant's laptop computer,

7   correct?

8   A. Correct.

9   Q. And the private keys for all these addresses were also

10   located on the laptop?

11   A. Yes, they were.

12   MR. HOWARD: Would you scroll on this one.

13   (Indicating)

14   Q. Now, Mr. Yum, could you please flip in your binder to

15   what's been marked for identification purposes as Government

16   Exhibit 610.

17   Do you recognize this exhibit?

18   A. Yes, I do.

19   Q. What is this?

20   A. It's a collection of screenshots that I made to spotcheck

21   and go through the link analysis that I performed.

22   Q. Were you involved in the creation of this exhibit?

23   A. Yes.

24   Q. So what are the screenshots taken from?

25   A. So there is three screenshots. In the center is the --

1   Q. Mr. Yum, we'll describe them once we -- what are the

2   sources of the information for these screenshots?

3   A. From the block chain and the list of addresses found on

4   Silk Road Marketplace and a list of addresses found on

5   defendant's laptop.

6   Q. Have you verified that this exhibit reflects true and

7   accurate copies of information from the block chain and true

8   and accurate screenshots from each of the lists of bitcoin

9   addresses?

10 A. Yes.

11   MR. HOWARD: The government offers Government Exhibit

12 610.

13   MR. DRATEL: Just with respect to the screenshots?

14   THE COURT: Just with respect to the screenshots?

15   MR. HOWARD: We're offering the entire exhibit as a

16 summary exhibit under 1006.

17   THE COURT: All right. Mr. Dratel, this is the one

18 that we were talking about?

19   MR. HOWARD: It is Government Exhibit 610.

20   THE COURT: Right. I only have one page in my --

21   MR. HOWARD: It is just one page, your Honor.

22   THE COURT: It is just a single page.

23   MR. DRATEL: It is one page.

24   THE COURT: All right. Received.

25   (Government's Exhibit 610 received in evidence)

F1tdulb4   Yum - direct

1   MR. HOWARD: Could you please publish Government

2   Exhibit 610.

3   Q. So, Mr. Yum, can you please walk us through what this

4   shows?

5   A. Sure. I guess it is best to start from the middle. So

6   that section is, as you've seen before from the example of

7   blockchain.info, the website where you can look up all the

8   bitcoin transactions, this is a transaction that I identified

9   which had bitcoin addresses from the marketplace making 3,900

10   bitcoin transactions to a bitcoin address that was found on the

11   defendant's laptop.

12   So that's the unique transaction ID. It was -- the

13   transaction was made April 3rd, 2013. Again, you see the

14   address starting on 1GarVY. And up top it has a screen capture

15   of the list of the addresses from the marketplace that you had

16   seen previously and a location where that can be found in that

17   list.

18   On the bottom this has the portion of the list of all

19   the addresses from the defendant's laptop, and you could see

20   that the address found in there, starting "17t6V," matches the

21   received bitcoin address in this transaction.

22   Q. So this exhibit shows 3,900 bitcoins were sent from an

23   address that was located on Silk Road servers to a bitcoin

24   address that was located on the defendant's laptop?

25   A. Yes. Exactly.

1   Q.   And that happened on April 3rd, 2013, according to publicly

2   available information on the block chain?

3   A.   Yes.

4   Q.   Now, was this the only transaction that you found linking

5   the bitcoin addresses on the Silk Road servers to the

6   defendant's -- the addresses on the defendant's laptop, or were

7   there others?

8   A.   No.   There were almost 4,000 unique transactions from Silk

9   Road Marketplace to the addresses that were found on the

10   defendant's laptop.

11   Q.   So could you please flip in your binder to what's been

12   marked for identification purposes as Government Exhibit 620.

13   Do you recognize this exhibit?

14   A.   Yes, I do.

15   Q.   And what is this exhibit?

16   A.   This is a list of all the transactions that I was

17   successfully able to identify.

18   Q.   Did you participate in the creation of this exhibit?

19   A.   Yes.

20   Q.   Does this exhibit accurately summarize information from the

21   bitcoin addresses that you found -- that you reviewed from

22   wallets found on the Silk Road servers and the defendant's

23   computer?

24   A.   Yes.

25   Q.   Does this exhibit accurately summarize information that you

F1tdulb4   Yum – direct

1   retrieved from the block chain regarding bitcoin transactions?

2   A.   Yes.

3   MR. HOWARD: The government offers Government Exhibit

4   620.

5   MR. DRATEL: Objection, your Honor.   *Crawford*,

6   foundation, hearsay.

7   THE COURT: All right.   Those objections are

8   overruled.   Government Exhibit 620 is received.

9   (Government's Exhibit 620 received in evidence)

10   BY MR. HOWARD:

11   Q.   So, Mr. Yum, what was the date range of the transactions

12   that you located?

13   A.   The first transaction occurred in September 24th, 2012, and

14   the latest transaction I was able to identify was August 21st,

15   2013.

16   Q.   And were the transactions spread across -- the thousands of

17   transactions were spread across that time period?

18   A.   Right.   It was spread across almost all of that entire

19   one-year span.

20   MR. HOWARD: So, Mr. Evert, could you just go to the

21   top, please.   Just zoom in on the first few rows.

22   Q.   Could you just describe what is depicted here?

23   A.   So it is a simplified version of all the screenshots that

24   you saw before, prior.   So that's -- the first column is there

25   is the time stamp, the time that this transaction was included

1   onto the block chain. The second column there is the unique

2   transaction ID that you could locate, pinpoint to the exact

3   transaction that's happened. So behind those transactions you

4   would actually see the addresses that are used to send bitcoins

5   to another receiving address, but you could easily also refer

6   to those two transactions by that transaction ID.

7   And the last column there, that's all the bitcoins

8   that were involved in that transaction that ended up in the

9   wallets found on bitcoin addresses found on the defendant's

10   laptop.

11   Q. So to be clear, Mr. Yum, you could put that unique

12   transaction number into the block chain on the website to get

13   the addresses that were involved in the transaction?

14   A. Correct.

15   Q. And those addresses matched the addresses that you found on

16   the Silk Road servers and the defendant's laptop?

17   A. Yes.

18   MR. HOWARD: Can we just scroll to the bottom of the

19   chart.

20   (Indicating)

21   MR. HOWARD: This is page 64 of the exhibit. Could

22   you zoom in on the bottom.

23   Q. And so the total was 700,253.91 bitcoins, is that correct?

24   A. That's correct.

25   Q. Now, Mr. Yum, can you please flip in your binder to what's

F1tdulb4   Yum - direct

1   been marked for identification purposes as Government Exhibit

2   620C.

3   What is this?

4   A. It appears to be a price index from a website coindesk.com.

5   It shows the date and the closing price of the bitcoins in U.S.

6   dollar amount.

7   Q. According to coindesk?

8   A. According to coindesk.

9   Q. Is that information available on a public website?

10   A. Yes.

11   Q. Now, is coindesk widely recognized and used by the bitcoin

12   community for bitcoin pricing?

13   A. Yes, not only bitcoin pricing but other data and news and

14   information about bitcoins.

15   Q. Now, based on your knowledge of the bitcoin community,

16   would you agree that the reputation of coindesk carries some

17   weight and is recognized as accurate in the community?

18   A. Yes.

19   Q. Does this exhibit accurately summarize pricing information

20   for bitcoins from coindesk?

21   A. Yes, it does.

22   MR. HOWARD: The government offers Government Exhibit

23   620C.

24   MR. DRATEL: No objection.

25   THE COURT: Received.

1   (Government's Exhibit 620C received in evidence)

2   THE COURT: We're going to -- Mr. Howard, in about

3   three minutes we are going to break for lunch.

4   Q. Can you just briefly explain what is depicted here?

5   A. So on the left column it has the date of these records. On

6   the right column it has the end-of-the-day closing price of

7   bitcoins, represented in U.S. dollar amounts, for each

8   corresponding date.

9   Q. Now, could you please flip in your binder to what's been

10   marked for identification purposes as Government Exhibit 620A.

11   What is this exhibit?

12   A. It is a summary spreadsheet of the analysis that I

13   conducted.

14   Q. Did you participate in the creation of this exhibit?

15   A. Yes.

16   Q. Does the exhibit accurately summarize information from the

17   bitcoin addresses you reviewed from bitcoin wallets found on

18   the Silk Road servers and on the defendant's computer?

19   A. Yes, it does.

20   Q. Does the exhibit accurately summarize information from the

21   block chain regarding bitcoin transactions?

22   A. Yes.

23   MR. HOWARD: The government offers Government Exhibit

24   620A.

25   MR. DRATEL: Objection. The same grounds, your Honor.

1   Hearsay, foundation --

2   THE COURT: All right. Those objections are

3   overruled. Government Exhibit 620A is received.

4   (Government's Exhibit 620A received in evidence)

5   MR. HOWARD: Can we zoom in on the top, please.

6   Q. Mr. Yum, could you please describe what's depicted in this

7   chart?

8   A. Yes. So it's a monthly summary breakdown of all the

9   transactions that took place between addresses found on Silk

10 Road Marketplace sending bitcoins to the addresses found on the

11 defendant's laptop.

12   So the span, again, starts from September 2012 all the

13 way down to August 2013. And for each month the second column

14 shows you the number of transactions that were conducted. The

15 third column shows you how many bitcoins in those transactions

16 were sent from Silk Road Marketplace to the addresses found on

17 the defendant's laptop. And the last column is the, I guess,

18 realtime conversion of U.S. dollar amounts for each one of

19 those dates where the transactions were identified.

20 Q. And did you use the coindesk information to convert to U.S.

21 dollars?

22 A. Yes.

23 Q. What do you mean by "realtime" conversion?

24 A. So I didn't just take one day, let's say -- you were asking

25 me before how much bitcoins were at the time of the arrest. I

1   didn't use one dollar amount. From the prior exhibit, I took

2   each individual day's closing and matched it to each of the

3   individual day's transactions and correctly calculated how much

4   bitcoins were worth at the time of that transaction.

5   Q. So this exhibit reflects that there was a total of $13

6   million worth of transactions at the time that each transaction

7   took place?

8   A. Yes.

9   Q. And a total of 700,254 bitcoins received --

10   A. Correct.

11   Q. -- from Silk Road servers to the defendant's laptop

12   wallets?

13   A. Yes.

14   Q. And 3,760 transactions, correct?

15   A. Correct.

16   Q. Could you please take a look at 620B in your binder.

17   Do you recognize what this is.

18   A. Yes, I do.

19   Q. And what is this?

20   A. It's a pie chart that I created also summarizing an

21   analysis that I did.

22   Q. Did you participate in the creation of this exhibit?

23   A. Yes, I did.

24   Q. Does this exhibit accurately summarize information from the

25   bitcoin addresses you reviewed from wallets found on the Silk

F1tdulb4   Yum – direct

1   Road servers and the defendant's computer?

2   A. Yes.

3   Q. And does it accurately summarize information from the block

4   chain regarding bitcoin transactions?

5   A. Yes.

6   MR. HOWARD: The government offers Government Exhibit

7   620B.

8   MR. DRATEL: The same objections, your Honor.

9   THE COURT: All right. Those objections are

10 overruled. 620B is received.

11   (Government's Exhibit 620B received in evidence)

12 Q. Mr. Yum, could you please explain what is depicted here?

13 A. So you see a pie chart in there, and the biggest, red part

14 has the 700,254 bitcoins that I correctly identified coming

15 from Silk Road Marketplace and being transferred to the

16 addresses found on the defendant's laptop.

17   I didn't stop there. I went back and analyzed all the

18 addresses on the defendant's laptop. And I've also found

19 89,000 other bitcoins that were sent to the addresses that were

20 found on the defendant's laptop.

21   So to, I guess, give you a summary of what I just

22 said, the defendant's -- addresses found on the defendant's

23 laptop received a total of almost 790,000 bitcoins, and out of

24 that 88 -- almost 89 percent were bitcoins that were

25 transferred from the Silk Road Marketplace directly to the

1   defendant's laptop in the amount of 700,254 bitcoins.

2   Q.   When you say "directly," you mean one-to-one transfers,

3   correct?

4   A.   One-to-one transfers.

5   So that 89,854, it could have came from other sources

6   but it could have also --

7   MR. DRATEL: Objection.

8   THE COURT: Sustained.

9   MR. HOWARD: This might be a natural breaking point,

10   your Honor.

11   THE COURT: All right.   Ladies and gentlemen, we're

12   going to take our lunch break now and come back at 2 o'clock.

13   I want to remind you all not to talk to each other or

14   anybody else about this case.   And, also, if you see any news

15   articles about this case, you are to not read those news

16   articles.   Turn away your eyes.   All right?   I instruct you to

17   do so.

18   Thank you.   We'll see you after lunch.

19   THE CLERK: All rise as the jury leaves.

20   (Continued on next page)

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F1tdulb4   Yum - direct

1   (Jury not present)

2   THE COURT: You may step down. Have lunch until

3   2 o'clock. I will see you back on the stand at 2.

4   (Witness not present)

5   THE COURT: All right, ladies and gentlemen. Let's

6   all be seated.

7   I wanted to make certain that we addressed the two

8   exhibits and I have one other matter and then whatever else you

9   folks would like to address before we break for lunch

10   ourselves.

11   There were objections by Mr. Dratel to Government

12   Exhibits 620 and 620A on *Crawford*, which I take it, Mr. Dratel,

13   was because of an argument that we discussed yesterday

14   afternoon of insufficient notice?

15   MR. DRATEL: No. It is really about the underlying --

16   in other words, you have a couple of preliminary steps in

17   Mr. Yum's analysis. Then you have an intermediate step and

18   then you have a final step, and we don't know how we get from

19   the intermediate step to the final step.

20   THE COURT: You can take him through that on

21   cross-examination.

22   MR. DRATEL: I understand. But there is no foundation

23   for it, and I believe that it is probably something that

24   creates a *Crawford* confrontation issue, similar to other sort

25   of scientific or computerized issues, where something is done

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1   and then someone comes in and presents something that is

2   essentially the work of a computer program and it is not -- you

3   know, it hasn't been verified. You know, I don't know what his

4   relationship is with the program. We don't know any of that.

5   We don't have any underlying stuff as to how it was done. It

6   is not a simple process, and I don't think it was done

7   manually.

8   THE COURT: Was that the nature of your *Crawford*

9   objection both for 620 and 620A?

10   MR. DRATEL: Yes, your Honor.

11   THE COURT: All right. So at this point I don't find

12   there to be any traction to that objection and so it was

13   overruled before. If after cross-examination you have some

14   basis to renew the application, then you can go ahead and do

15   so. See what you want, what you can develop on

16   cross-examination. You are certainly entitled to go into all

17   aspects of how he performed this exercise.

18   MR. DRATEL: And with respect to the notice, your

19   Honor, my application would be, again, to put off the cross

20   until Monday morning so that we can absorb stuff that we were

21   actually hearing for the first time about a document that has,

22   as you can see now, an extraordinary number of transactions.

23   There is zero backup. Zero anything for it. We have been

24   trying to develop what we can but we still need more time to do

25   that.

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1   THE COURT: When you say that there is zero backup,

2   zero anything, my understanding from our conversation yesterday

3   afternoon was that all of this information, which is the very

4   information at the heart of this case, was produced during

5   discovery.

6   Mr. Howard.

7   MR. HOWARD: That's correct. On Sunday night we

8   provided the spreadsheets --

9   THE COURT: Let's go back first to what was --

10   MR. DRATEL: The analysis, how the analysis was done.

11   THE COURT: Mr. Dratel, let me just make sure I have

12   got the facts in order.

13   Tell me when and what was produced that underlies this

14   analysis during the discovery.

15   MR. HOWARD: Yes. For almost a year now, the

16   defendant has had access to images of his laptop and the

17   various servers where these log files were contained, including

18   what's been referred to as the Philadelphia backup server and

19   the Iceland bitcoin server. Those images included all of these

20   bitcoin wallets and the private keys for those wallets, which

21   is the same images the witness just talked about. Based on

22   that, all of this information, all of the bitcoin addresses

23   were stored in those wallet files that have been available to

24   the defendant for over a year.

25   THE COURT: All right. And then, as I understand it

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1   from our conversation just before we all adjourned last night,

2   the analysis that is at 620 and the summary of that, where the

3   comparison was done, that analysis was performed during the

4   course of this trial and was produced on Sunday; is that right?

5   MR. HOWARD: Yes, you are right, your Honor. And

6   within a couple of hours of actually us receiving the

7   spreadsheets that had all the data in them and, you know, the

8   much more complicated and much more voluminous than the summary

9   charts that we're pushing into evidence, but that was produced

10   promptly to the defense as soon as we had them generated.

11   THE COURT: All right. Mr. Dratel.

12   MR. DRATEL: A couple of things. One is they had it,

13   too. So why are we getting this in week three of trial if they

14   had all of this information before as well? Why did they

15   prepare this analysis -- they've only started once the trial

16   started.

17   THE COURT: Well, as I understand it, this all went

18   back to your opening statement.

19   MR. DRATEL: Yes. But what I'm saying is to say that

20   we had all the wallets and the addresses is immaterial in the

21   sense that they had it too. If they wanted to put together an

22   exhibit that linked all of that, they should have done it in

23   advance of trial, not -- and they've done it during trial, OK,

24   but I should have the opportunity -- this witness, it took more

25   than a hundred hours to prepare this analysis. I've had it for

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1   maybe 80, not including the time in court and sleeping and

2   doing all the other stuff that needs to be done in this case.

3   So it's really no time at all. This witness took a hundred

4   hours. They got paid $55,000 for this.

5   THE COURT: Well, the objections are overruled, as

6   I've said. And in terms of timing, we will go into

7   cross-examination right after the government is done with its

8   direct examination with this witness.

9   The materials that underlie the analysis were produced

10   long ago. Based upon the opening statement and based upon one

11   of the theories of the defense, which is that the defendant was

12   a bitcoin trader and that any bitcoins in his possession were

13   from bitcoin trading, it was reasonable to expect that you

14   yourself had done such an analysis and, therefore, that you had

15   some intention of presenting something that would have shown

16   the opposite. In any event, you've opened the door to it, and

17   we're going to proceed. And the fact that the government

18   adjusted and was able to do so is not something that is

19   particularly problematic or unusual. So that's my ruling on

20   that.

21   So we'll proceed with cross-examination with this

22   witness after lunch.

23   MR. DRATEL: Your Honor, what I'm asking for, in

24   functional terms, is a two-and-a-half hour accommodation so

25   that I can prepare a proper cross-examination of this witness.

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1   THE COURT: I have heard your application, and we're

2   going to go directly into the cross-examination of this

3   witness. If you --

4   MR. DRATEL: Then I am making a notice objection to

5   the entirety of that level of his testimony --

6   THE COURT: The objection is overruled. I think

7   you've got your position well and truly stated on the record.

8   If you have any additional positions you want to state, you can

9   file it in a letter on the docket.

10   In terms of hearsay, there is no hearsay issue with

11   these documents, and certainly the foundation was well

12   established for these. So those objections are similarly

13   overruled.

14   Mr. Howard, would you like to address or fill out the

15   record in any regard yourself?

16   MR. HOWARD: Yes, your Honor.

17   The fact is, as you correctly stated, this door was

18   opened by the defense during their opening statement. They

19   made a claim about the source of the bitcoins that were

20   recovered from the defendant's wallet files. In response to

21   that, we performed an analysis with the help of outside

22   consultants. As soon as that analysis was ready, we produced

23   the underlying data to the defense. We produced some summary

24   charts today in court.

25   It should be noted that there was some time that was

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1   required to produce the analysis, but at the end of the day it

2   is all based on public records showing one-to-one connections

3   between bitcoin addresses. It is not anything very

4   complicated. The time was spent on just getting the process to

5   get that together.

6   THE COURT: All right. If either party has any

7   additional positions that they would like to state on this that

8   they want to put in by letter -- obviously, you can't raise new

9   issues -- that you haven't had a full chance to air just now,

10   file something for tomorrow morning.

11   In terms of I had more issue, which is Juror No. 4.

12   We have heard back from Juror No. 4's employer, and they are

13   not -- it is disappointing, they are not willing to accommodate

14   the issue with Juror No. 4.

15   So the issue is as follows: She is required to begin

16   taking vacation time after tomorrow -- after Monday.

17   Am I right?

18   THE CLERK: Yes.

19   THE COURT: Monday is the day, her timing where her

20   company will allow her just the time.

21   Now, she does not know that we have heard back,

22   because I wanted to talk about this with you folks and

23   determine how you believe we should proceed. Obviously, there

24   are a couple of different things that we can do, one of which

25   is just -- I think it is fair to tell her that we've heard back

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1   and that we understand that there is not going to be an

2   accommodation. I need to understand from you folks whether

3   that should be done in the robing room or at sidebar, you know,

4   with you folks, or whether or not Joe can just convey that

5   simple message: We've heard back from her employer. We

6   understand that they are not going to alter the manner in which

7   they previously told her they were going to proceed.

8   Separately from that, I don't think we should solicit

9   whether or not she is going to now raise a hardship issue and

10   seek to be dismissed. I think that we should wait and see what

11   she does and then respond step-by-step accordingly. It may be

12   that she is prepared to take vacation time. She did present

13   this issue to us, but I don't have any indication that she -- I

14   don't know one way or the other. So I would just leave that.

15   See what the response is next.

16   One thing that I think would be helpful in that regard

17   would be to give the jury some sense as to where we are with

18   things with lots of room around the edges in case things

19   change. But we've got one government witness left after

20   Mr. Yum, who is expected to take likely less than a day, and

21   then after that we'll be into the next phase. So that's my

22   proposal.

23   So let me just summarize. We would convey to Juror

24   No. 4 that we've heard back -- she may have heard herself, but

25   she may not, and we don't want her taking inadvertently

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1   vacation time thinking that maybe there is some accommodation

2   that had been made. So we should tell her that we've heard

3   back. Leave that. And then I would propose at the end of the

4   day to assess with you folks at our afternoon break where we

5   are in terms of timing and schedule and then give the jury just

6   some sense as to where we are going.

7   Mr. Howard.

8   MR. HOWARD: That sounds acceptable to the government.

9   THE COURT: Mr. Dratel.

10   MR. DRATEL: The only thing I have a position on right

11   now is that any communication should be with the Court and the

12   juror. I think that would be the appropriate way to do it in

13   the robing room and that the communication be on that level.

14   THE COURT: And by that you mean, with the Court, you

15   mean without --

16   MR. DRATEL: When she is informed. I think it is

17   appropriate, based on case law and everything, that the Court

18   informs the juror.

19   THE COURT: Right. My question to you is do you want

20   to be present for that?

21   MR. DRATEL: Yes.

22   THE COURT: Fine.

23   MR. DRATEL: Because she may respond right there.

24   THE COURT: Right. I mean, that's always possible.

25   Obviously, if she did and it were just a communication with me,

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1   I would not communicate back without conferring with you. And

2   I would receive the communication, indicate to her that I

3   needed to proceed with counsel. But we would proceed, believe

4   me, very carefully.

5   I'm happy, though, Mr. Dratel to have you folks --

6   what I would suggest is that we just do it in the robing room

7   just before we resume. And the question then is is the

8   defendant willing to waive his appearance for that session?

9   MR. DRATEL: Yes, your Honor.

10   THE COURT: All right. Thank you.

11   Then that's what we'll do in terms of informing her.

12   What's your view on the rest of it? Sort of take it

13   as it comes?

14   MR. DRATEL: Well, I'm not sure as to whether, if she

15   doesn't respond, whether it is appropriate to have some brief

16   voir dire about impact on her. I'm not sure. Can I think

17   about that?

18   THE COURT: Why don't you think about it. Why don't

19   we then resume ourselves and at least we can resume -- we will

20   need the defendant for this -- as to how you would like to

21   proceed with her at 1:45.

22   So I need the marshals to make sure that Mr. Ulbricht

23   is back at 1:45. Will that be all right? Yes. I'm getting a

24   nod of the head. Thank you.

25   So at 1:45 we'll resume and then we'll figure out if

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1 you've got something else you would like us to ask.

2   MR. DRATEL: OK.

3   THE COURT: All right. Thank you.

4   Anything further either of you would like to raise

5 right now?

6   MR. TURNER: No, your Honor.

7   THE COURT: Mr. Dratel?

8   MR. DRATEL: No.

9   THE COURT: We're adjourned.

10   THE CLERK: All rise.

11   (Luncheon recess)

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1   **A F T E R N O O N   S E S S I O N**

2   1:51 p.m.

3   (Jury not present)

4   THE COURT: All right. Let's all be seated.

5   And the purpose for resuming at this point was to see

6   whether or not, Mr. Dratel, you had any additional questions

7   you would like me to ask of Juror No. 4 basically before she

8   expresses anything, or if she expresses something, you know, if

9   you have any views.

10   MR. DRATEL: Well, I guess if she doesn't express

11   anything, I'm not sure there is any need to go further. But if

12   she does express any anxiety about the time, we should probably

13   ask what the impact would be on her.

14   THE COURT: All right. The way I would word it is

15   would using her vacation time make her unable to be fair in

16   this case. We'll see what she says. It could go in a variety

17   of directions at that point.

18   Mr. Howard, Mr. Turner, do you have anything else that

19   you would like the Court to ask?

20   MR. TURNER: I just think it might be worth noting how

21   much longer the trial is expected to continue.

22   THE COURT: All right. So in that regard, it's I

23   think relatively straightforward for me to say that the

24   government's case is likely to end on Monday and then we're

25   going to get into the defense case. Actually, I can just be

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1   vague and say we're -- you know, I don't want to commit to a

2   particular timeframe, but we're far along in this case and I

3   would think that this would be done in a week or shortly

4   thereafter.

5   It's going to take, I think, if, Mr. Dratel, depending

6   on the length of his case, it's going to take at least until

7   Wednesday midday, I think, and that's if the defendant doesn't

8   testify. If the defendant does testify, that could take

9   Wednesday, Thursday -- you know, I want to let that run its

10   natural course. And so I don't want to commit us with a juror.

11   By the way, once we've previewed the timing to the

12   juror, I will need to tell the rest of the panel that as well

13   when they come out. So I don't want to commit. So it's

14   something that's sort of like we'll be done next week because

15   we may well not be done next week. We may be done with the

16   testimony next week but it is hard for me to predict and she

17   can't predict how long deliberations will take. You know,

18   they've got a number of counts.

19   So I would say that we are far -- you know, without

20   committing, we're far along in this case and I hope to be able

21   to give you another update. And then once we know from

22   Mr. Dratel how long his case is going to be, we can maybe on

23   Monday give them a further update.

24   How does that sound, "far along," using that phrase?

25   MR. TURNER: That sounds good to the government.

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1   MR. DRATEL: Yes, your Honor.

2   THE COURT: Mr. Turner, is there anything you want me

3   to say more specifically, or Mr. Howard, than "far along"?

4   MR. TURNER: No. Thank you, your Honor.

5   THE COURT: I would love to say that we are likely to

6   have the case go to the jury on Thursday, but I don't want to

7   do that because we may not.

8   MR. TURNER: I understand. The witness may have a

9   question and I just want to make sure --

10   THE COURT: All right. Well, I would actually preview

11   this to her when I -- if she says anything like, oh, that's

12   really too bad -- if she says something like, oh, that's really

13   too bad, then I think I would say is it going to affect your

14   ability to be fair in this case that you are going to have to

15   use your vacation time and see what she says. And then after

16   that I could say, well, at least I can tell you that, you know,

17   we're very far along in this case. OK?

18   All right. So, Joe, do we know if she is here?

19   THE CLERK: She is not here yet.

20   THE COURT: She is not here yet.

21   All right. So as soon as she gets in, we'll pick up

22   with her in my robing room. So Joe will bring you folks in

23   first. So stay in the vicinity. Don't leave. And with the

24   court reporter. And then we'll pick up as soon as we're done

25   with her. We'll just take a couple of minutes with her. All

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1   right?

2   MR. TURNER: Your Honor, I just wanted to note that --

3   picking up from our conversation this morning about the jury

4   instructions --

5   THE COURT: Yes.

6   MR. TURNER: -- that I was incorrect about the

7   "organizer" language. That does not come from a Second Circuit

8   case. It comes from multiple other circuits that I can provide

9   the Court with the citations, if you would like, an hour later.

10   THE COURT: Why don't you just state -- don't give me

11   the names, just give me the citations for those. It will make

12   it a little faster.

13   MR. TURNER: Sure. 885 F.2d 195, the Fourth Circuit;

14   965 F.2d 1390, the Sixth Circuit; 843 F.2d 421, the Tenth

15   Circuit; 734 F.2d 1030, that's Fifth Circuit --

16   THE COURT: I'm sorry. 734?

17   MR. TURNER: F.2d 1030 is a Fifth Circuit.

18   THE COURT: Right.

19   MR. TURNER: And then there is an NDNY case that

20   cites, as well, 912 F.Supp. 655. There is also a related

21   Seventh Circuit case --

22   THE COURT: That is not F.Supp.2d, it is F.Supp?

23   MR. TURNER: F.Supp.

24   THE COURT: All right. Let me just ask you whether or

25   not the Second Circuit has had the question presented to them

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1   so far as you are aware?

2   MR. TURNER: I just searched for that specific

3   language.

4   THE COURT: OK.

5   MR. TURNER: I think the larger point is that you

6   don't have to actually control the people you are organizing.

7   They could be -- there is also a Seventh Circuit case, 847 F.2d

8   1233. It doesn't use the exact same language but it was cited

9   along with those other case.

10   THE COURT: Terrific. Now, Juror No. 4 I am informed

11   has arrived. So why don't counsel come with me and the court

12   reporter into the robing room right now.

13   As soon as we are in there, Joe, why don't you bring

14   Juror No. 4 in. All right?

15   THE CLERK: All rise.

16   (In the robing room)

17   MR. TURNER: Who is the juror's employer?

18   THE COURT: NYU Medical Center.

19   (Juror No. 4 present)

20   THE COURT: Come on in.

21   JUROR NO. 4: How are you?

22   THE COURT: Just have a seat. I'm sorry.

23   JUROR NO. 4: I think I will. I usually stand in the

24   other room. That is OK.

25   THE COURT: I'm sorry for the formality of all of us,

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1   but we have to do things on the record all the time.

2   JUROR NO. 4: Yes.

3   THE COURT: And I wanted to let you know that we have

4   heard back from your employer, and they're not willing to

5   change what they've said is the policy that they have about the

6   vacation time. We pushed back and they have just expressed an

7   unwillingness to do it. So I wanted to let you know that.

8   That is the purpose for having you in.

9   JUROR NO. 4: Oh.

10   THE COURT: All right?

11   JUROR NO. 4: OK.

12   THE COURT: And so if -- one thing I can tell you is

13   that we are relatively far in and far along in this case.

14   JUROR NO. 4: It feels that way, yeah.

15   THE COURT: So, you know, if you have any other

16   concerns, you are to let us know.

17   JUROR NO. 4: In terms of relatively, I mean, is

18   anybody able to say --

19   THE COURT: You know, we'll have I think a better view

20   on this Monday.

21   JUROR NO. 4: Mm-hmm.

22   THE COURT: But the problem is, here's the issue.

23   JUROR NO. 4: Right.

24   THE COURT: Things are pretty uncertain. If I tell

25   you one timeframe, I told you it could be as soon as the end of

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1   next week, that could end up being wrong and it could go on for

2   a week beyond that. And if it is going to make a huge

3   difference, then I don't want to have you get your sights set

4   on a particular timeframe because you don't know how long you

5   and your colleagues are going to want to deliberate and it is

6   just going to be --

7   JUROR NO. 4: Yeah.

8   THE COURT: So there is always with trial a certain

9   amount of uncertainty.

10   JUROR NO. 4: OK. Then I'm just curious, you know,

11   because I did Google that, you know, can your employer actually

12   do this, you know, require that you use vacation time for jury

13   service. And according to the newyorkstate.gov website, no,

14   they can't. So I'm just idly curious to know, you know, all

15   well and good if this is what they put in the employee

16   handbook, but how is that possible or where is the disconnect

17   there?

18   THE COURT: You know, I don't know and I haven't

19   looked at that website. But this is the federal system so I

20   don't know if there is a difference there.

21   But we checked with our jury department when this

22   first came up, and the reaction we got -- and they face

23   questions like this fairly frequently -- is if it's disclosed

24   in the employee handbook and it's there and it's been there and

25   it is not just for you for this case, then --

F1tdulb4

1   JUROR NO. 4: It's tough.

2   THE COURT: -- that's the way it is.

3   Now, I haven't done an independent investigation of

4   that. We'll look at it again just to sort of be sure so that I

5   can look underneath it if you've seen something.

6   Let me ask you, are you going to be able to be fair in

7   this case if you have to use vacation time? Is it going to be

8   a problem for you?

9   JUROR NO. 4: No, that wouldn't be a problem. I mean,

10   it just gets to be -- of course, since I went into work on a

11   snow day when the office was technically closed, I get an extra

12   vacation day. It's these little things, but it does obviously

13   come down to like how many more witnesses we have, and I know

14   that there is a wildcard there. So, you know, yes, I wouldn't

15   want to, you know, blow my entire bank. I mean, it is

16   reasonably generous but, still, I've got kids, you know.

17   THE COURT: If at any point in time you believe that

18   you are unable to be fair in this case because of that, you

19   should definitely let us know, and we'll then talk with you at

20   that time about it. And I'll try to give you and the rest of

21   the jury panel an update on timing and give you something a

22   little more concrete. Even if you can't predict length of

23   deliberations, etc., if you have a sense of when the end of the

24   case is going to be, that might help you some in your own mind

25   to gain some comfort. So we need to sort of all talk about

F1tdulb4

1   that. OK?

2   JUROR NO. 4: Yeah. Then is the only way for me to

3   then get off is to claim that it would cloud my judgment? I

4   mean, even if it wouldn't. I mean, I wouldn't want to --

5   (Laughter)

6   THE COURT: You are speaking like a human being. Let

7   me just say that whenever a juror feels like there is something

8   external that is causing them to be unable to be fair, it's of

9   real concern to us and we need to explore it fully. We would

10   press you hard on it and because, you know, jury selection

11   here, as you know, it was complicated and you guys filled out a

12   questionnaire. You were accepted because of each juror's

13   individual qualifications. We want the jurors that have been

14   selected for this group, but we want you also to be able to be

15   fair. And if something is clouding that, we need to know.

16   JUROR NO. 4: OK. Yeah, I mean, I had no idea -- I

17   mean, while -- the classic thing, you know, like you are handed

18   a wrap of paper, you know, in HR and you sign it, you know, you

19   are giving me the employee handbook, have you read this, you

20   know. So, I mean, I had no idea that that was actually the

21   policy. And, anyway, you know, and having been selected for

22   jury duty two other times, it is like what are the chances that

23   I actually get it this time. So, anyway.

24   THE COURT: Once you have been selected twice, your

25   chances are pretty high. That means there is something about

F1tdulb4

1   you that makes you --

2   JUROR NO. 4: Was it just me, though? I mean, how

3   could that be?

4   (Laughter)

5   THE COURT: Let the record reflects laughter.

6   JUROR NO. 4: So you're saying I would have to then

7   meet with you all again in order to -- you know --

8   THE COURT: Yeah. I don't want to make it seem like

9   there is some barrier with you. But what I do want to do is I

10   want to suggest to you that I -- that if you really feel like

11   you cannot be fair, come back to us.

12   JUROR NO. 4: OK. I am nervous.

13   THE COURT: Then come back to us. All right?

14   JUROR NO. 4: OK.

15   THE COURT: We do need to question you. That is just

16   the way the process works. OK?

17   JUROR NO. 4: Right.

18   THE COURT: So everybody will be here. Nobody bites.

19   But if it's that you feel like you can be fair but,

20   you know, you wish this didn't happen like this, that, you

21   know, that you weren't going to have to use your vacation time,

22   then I'm going to ask you just to hang on.

23   JUROR NO. 4: OK. All right. So I think I have one

24   more day, Monday, right?

25   THE COURT: One more day in your --

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1   JUROR NO. 4: In my --

2   THE COURT: Allotted time.

3   JUROR NO. 4: In my allotted time, right.

4   THE CLERK: Since jury selection, we have had nine

5   trial days.

6   THE COURT: You should count yourself and make sure

7   what your count is. All right?

8   JUROR NO. 4: OK.

9   THE COURT: Then I'll try. We are going to try to

10   assess, as we have been doing as things go along, how much

11   longer and try to give you guys what guidance we can. All

12   right?

13   JUROR NO. 4: Right.

14   THE COURT: Without causing undue expectations in any

15   direction. OK?

16   JUROR NO. 4: All right.

17   THE COURT: Thank you. Thank you for coming in here

18   with this multitude --

19   JUROR NO. 4: Thank you.

20   (Juror not present)

21   THE COURT: We are off the record. Actually, stay on

22   the record a minute in light of that.

23   Anybody have any view as to anything else that we

24   should do at this time?

25   MR. DRATEL: No, your Honor.

F1tdulb4

1   MR. TURNER: No. I don't think so, your Honor.

2   THE COURT: All right. Then let's go off the record

3   and we will then head on out.

4   (Continued on next page)

F1tgulb5   center header

1   (In open court; jury present)

2   THE COURT: Let's all be seated. Thank you.

3   I wanted as a housekeeping matter, to give you folks a

4   sense of where we are in the case. We are what I would

5   characterize as far along in the case. I don't want to be

6   anymore specific than that right now because things can

7   fluctuate some. I'm going to try very hard to give you a

8   better sense of where we are on Monday. Right now, I just

9   wanted to use those words to sort of give you a general sense

10   of where we are in the case, all right.

11   Thank you. Let's continue with Mr. Yum.

12   Mr. Howard.

13   MR. HOWARD: Thank you, your Honor.

14   DIRECT EXAMINATION

15   BY MR. HOWARD:

16   Q. Good afternoon, Mr. Yum.

17   A. Good afternoon.

18   MR. HOWARD: Mr. Evert, can we please go back to page

19   one of Government Exhibit 608 that was admitted for

20   demonstrative purposes.

21   Q. I just want to clarify a couple things about bitcoin log

22   files real briefly.

23   A. Sure.

24   Q. Earlier you testified a bitcoin wallet can contain multiple

25   bitcoin addresses, correct?

F1tgulb5   Yum - direct

1   A.   Yes.

2   Q.   Can each bitcoin address only contain one bitcoin or can it

3   contain many bitcoins?

4   A.   It can contain many bitcoins and you can use it in multiple

5   transactions.

6   Q.   In fact, earlier you testified that you moved the 144,000

7   bitcoins from the defendant's wallet file to one FBI bitcoin

8   address, correct?

9   A.   Correct. So in that instance, I had to create a wallet

10   file for the government and in that wallet file create one

11   address, the address that was depicted before starting 1FfmbH.

12   And to that -- to that one single address, I made over 400

13   transactions in increments of somewhere around 300 bitcoins.

14   So that whole 144,000 bitcoins all went to one single address.

15   So you could reuse the same address over and over or create

16   multiple addresses and spend it or send it how ever you want

17   between all the addresses.

18   MR. HOWARD: Mr. Evert, can we please go to page four

19   of Exhibit 609, which was also admitted for demonstrative

20   purposes.

21   Q.   Mr. Yum, earlier you testified that as part of your

22   analysis, you were focusing on simply one-to-one transactions,

23   correct?

24   A.   Correct.

25   Q.   Can you explain a little bit more what that's about.

F1tgulb5   Yum - direct

1   A.   Yes. So perhaps I could use an analogy where your wallet

2   is kind of similar to -- if you put it simply, it's like your

3   own personal bank, so you don't have to work with any financial

4   institution. Your wallet contains the addresses which kind of

5   works like your bank accounts. So wallet is your bank and you

6   can open up as many bank accounts that you want.

7   So in here, all the wallets that were found on Silk

8   Road Marketplace, the Silk Road Marketplace created all these

9   different addresses and each one of these addresses would be

10 similar to a bank account. And on the right side, the

11 defendant's laptop contained wallet files with all these

12 addresses. So his wallet, his bank, contained all these

13 different accounts that could receive bitcoins.

14   So, the analysis that I did, I didn't do any

15 complicated analysis. It was very -- it was a very simple

16 direct one-to-one transfer. So if I have a bank account and I

17 want to wire somebody else money, all I'm doing is

18 wiring -- using my bank to wire-transfer money directly to

19 someone else's bank account.

20   So the analysis that I did was wire transfers that

21 occurred straight from Silk Road Marketplace directly to the

22 bank -- to the accounts that were found on the defendant's

23 laptop.

24 Q.   And to be clear, all of that information is publicly

25 available on the block chain, correct?

1   A.   Right.   So the beauty of bitcoin is the block chain

2   contains every single transaction that's occurred in the

3   history of bitcoin.   So if this was actually a bank, we would

4   have to figure out what the bank is and subpoena the bank to

5   get the bank transaction records.

6   In this case, block chain is on the Internet every --

7   by all the bitcoin users, so I could reliably go to this block

8   chain and get the same results that I would normally have to

9   request the bank to provide the transaction records.

10   Q.   So now, let's go back to Government Exhibit 620B, please,

11   which is where we left off before the lunch break.

12   A.   Yes.

13   Q.   Mr. Yum, what does the entire pie here represent?

14   A.   The entire pie is all the transactions that came to the

15   addresses found on the defendant's laptop.

16   Q.   And what does the red area depict?

17   A.   The red area -- out of all the bitcoins that the

18   defendant's laptop received, the red area came directly --

19   straight wire transfer from the accounts that are found on the

20   Silk Road Marketplace.

21   Q.   And those are the one-to-one transactions you were talking

22   about?

23   A.   The one-to-one transactions.

24   Q.   What does the blue area represent?

25   A.   The blue area is everything that is not a one-to-one

1   transaction. So the defendant's wallet file received those

2   89,854 bitcoins and I can't link that directly back to Silk

3   Road Marketplace.

4   Q. So if Silk Road wallets were used to send bitcoins to an

5   address that was not in the defendant's laptop file and then it

6   was transferred --

7   MR. DRATEL: Objection.

8   THE COURT: Sustained.

9   MR. HOWARD: Mr. Evert, can you please publish

10   Government Exhibit 601, which is already in evidence.

11   Q. Mr. Yum, did you do any analysis of transactions that went

12   from the Silk Road servers to Ross Ulbricht's laptop that were

13   not one-to-one transactions?

14   MR. DRATEL: Objection.

15   THE COURT: Hold on.

16   MR. DRATEL: Objection to form.

17   THE COURT: I'll allow it.

18   You may answer.

19   A. I'm sorry. Can you repeat the question.

20   Q. Did you do any analysis of transactions from the Silk Road

21   server bitcoin addresses to the Ross Ulbricht laptop addresses

22   that were not one-to-one transactions?

23   A. No, I did not.

24   Q. So Mr. Yum, Government Exhibit 601 is a screenshot of the

25   block chain we discussed earlier, correct?

F1tgulb5   Yum - direct

1   A. Correct.

2   MR. HOWARD: Could we zoom in on the bottom-two

3   transactions here, Mr. Evert.

4   Q. Did you do any further analysis of these two transactions?

5   A. Yes, I did.

6   Q. And generally what did you do?

7   A. I looked at all the addresses, the accounts that are making

8   this transfer. The one on the bottom is 1,670 bitcoins. The

9   four addresses you see on the left were used to send that 1,670

10   bitcoins to that address on the right starting 1MwvS1.

11   Similarly, the transaction on top, there are three bitcoin

12   addresses accounts that sent 3,000 bitcoins to that same

13   address starting 1MwvS1.

14   Q. And what specifically did you look into regarding these

15   transactions?

16   A. I checked to see if I could locate any of these addresses

17   on the left, three from the top, four from the bottom, and

18   those addresses were found within the list of addresses, list

19   of accounts that I located on the defendant's laptop.

20   Q. Could you please take a look at what's been marked in your

21   binder as 631 -- 630 and 631 for identification purposes. Do

22   you recognize these exhibits?

23   A. Yes, I do.

24   Q. What are these exhibits?

25   A. It's a series of screenshots that I put together to explain

F1tgulb5   Yum - direct

1   a transaction.

2   Q. Were those the transactions we just described on the block

3   chain?

4   A. Yes.

5   Q. Did you participate in the creation of these exhibits?

6   A. Yes, I did.

7   Q. Are they a true and accurate screenshots of the bitcoin

8   address list taken from the defendant's laptop as well as the

9   bitcoin address list from -- sorry -- just from the laptop,

10   correct?

11   A. Just from the laptop.

12   Q. And does it also include a true and accurate screenshot

13   from the block chain?

14   A. Yes.

15   MR. HOWARD: The government offers Government

16   Exhibit 630 and 631.

17   MR. DRATEL: No objection.

18   THE COURT: Received.

19   (Government's Exhibits 630, 631 received in evidence)

20   MR. HOWARD: Mr. Evert, can you please publish

21   Government Exhibit 630.

22   Q. Mr. Yum, can you please describe what is depicted here.

23   A. So I want to start with the screenshot up top up here.

24   That is a screenshot segment of this transaction you see appear

25   identify with transaction ID 4a0a5b. Block chain info, if you

1   look at that transaction, it shows on March 31, 2013, these

2   four addresses sent 1,670 bitcoins to this address on the right

3   beginning with 1MwvS1.

4   So my interest was the addresses on the left. I took

5   each one of those addresses and compared it against the list of

6   addresses that I got from the defendant's laptop and every

7   single one of those were found within the addresses acquired

8   from the defendant's laptop.

9   Q.   Were the private keys for those four addresses on the

10   defendant's laptop found on the defendant's laptop?

11   A.   Right. I'm able to get this list of addresses because I

12   have access to the entire wallet, which includes the private

13   keys.

14   So private keys are essentially -- it's like a

15   password or a key allowing you to access the bitcoins that are

16   linked to these public addresses. It allows me to figure out

17   what this public address is and also the keys allow the user to

18   spend the bitcoins in those addresses the way they want, how

19   ever they want.

20   Q.   So to be clear, the addresses on the left-hand side of the

21   column, you identified as being addresses on the defendant's

22   laptop, correct?

23   A.   Correct.

24   Q.   So what does this show overall about this transaction?

25   A.   It shows that the defendant's lap -- that the wallet file

F1tgulb5   Yum - direct

1   on the defendant's laptop made the transaction that's shown up

2   top. So this 1,670 bitcoins came from the wallet files of the

3   defendant's laptop and it was sent to this address.

4   MR. HOWARD: Mr. Evert, can you please publish

5   Government Exhibit 631.

6   Q. Is this a diagram depicting the other transaction in the

7   block chain?

8   A. Yes.

9   Q. Can you please describe what is depicted here.

10   A. Again, to start from the top, this is the detail of this

11   transaction ID e7db524, which was documented on the block chain

12   on March -- 2013, April 8. And again, there's three addresses,

13   three accounts that made the transaction the amount of 3,000

14   bitcoins to the address on the right which starts with 1MwvS1.

15   Q. So all these three of those addresses were also found, on

16   the left, were also found on the defendant's laptop?

17   A. Right. I took each one of those addresses and I compared

18   it against the list of bitcoin addresses, bitcoin accounts that

19   were located on the defendant's laptop and I was able to

20   successfully find all three of them.

21   Q. So like Government Exhibit 630, does this demonstrate that

22   this transaction occurred out of the wallet found on the

23   defendant's laptop?

24   A. Right. The wallet file, the important thing is it holds

25   the private key that allows the user to be able to send these

F1tgulb5   Yum – direct

1   bitcoins. So all three of the addresses were found on the

2   defendant's' laptop and the wallet file had the private keys

3   allowing this transfer to happen from the bitcoins that are

4   contained in the wallet.

5   MR. HOWARD: I think I'm concluding. Let me just

6   check with cocounsel and I'm done. Two more questions.

7   Q. So this is separate from the analysis we were looking at

8   before that was comparing bitcoins sent from the Silk Road

9   servers to the defendant's laptop, correct?

10   A. Correct.

11   Q. And so these are transfers that occurred from the

12   defendant's laptop, not to the defendant's laptop, correct?

13   A. Correct.

14   MR. HOWARD: No further questions.

15   THE COURT: Thank you.

16   Mr. Dratel.

17   MR. DRATEL: Thank you, your Honor.

18   CROSS-EXAMINATION

19   BY MR. DRATEL:

20   Q. Mr. Yum, the analysis that you spent on the bitcoin wallet

21   analysis that you've been talking about for the latter part of

22   your testimony, you began that within the last two weeks?

23   A. A little less than two weeks.

24   Q. And you said you worked with one other person on it?

25   A. Yes.

1   Q.   Who was that?

2   A.   It's a colleague of mine.

3   Q.   And what is his name?

4   A.   Mathew Edmond.

5   Q.   And what's his -- what are his credentials?

6   A.   He has a doctorate in cryptology.

7   Q.   What did he do as part of this project?

8   A.   He worked with me to identify the wallets, extract the

9   bitcoin addresses, and compare that to the block chain.

10 Q.   Did he do that actual work?

11 A.   We both did.

12 Q.   So he did some of that work?

13 A.   Yes.

14 Q.   Correct?

15   How many hours did he put into that?

16 A.   We both worked on it for about a week together, so I think

17 we're a little short of 100 hours. He put in about 60. I put

18 in about 40.

19 Q.   And what were his contributions to Government Exhibit 620

20 which is the spreadsheet, the large spreadsheet with all of the

21 transactions. Right, isn't that the --

22 A.   Yes.

23 Q.   So what's his contribution to that?

24 A.   He assisted me in obtaining the underlying raw information

25 for that summary.

F1tgulb5   Yum –

1 Q. And how was that exhibit created?

2 A. That one? I believe I just summarized the Excel file, so

3 that's an Excel spreadsheet. I took all of the raw data and

4 created a summary chart on Excel.

5 Q. But in terms of the matching, did you use any software to

6 match the transactions?

7 A. Oh, the actual analysis?

8 Q. Yes.

9 A. Yeah, we loaded all the information onto a table and did a

10 query on that table to find the matching transactions.

11 Q. And what program?

12 A. I believe the actual matching was done through Python.

13 Q. And what is Python?

14 A. Python. It's a scripting language.

15 Q. Did you have any participation in writing the code for that

16 program?

17 A. Actual hands-on typing was done by Mr. Edmond, but we both

18 sat down to work out the logic.

19 Q. But I mean in terms of the program itself, did you create

20 that program?

21 A. Oh, no. So the reason why we use Python is there's

22 available software called Pie Wallet, which was also found on

23 the defendant's laptop, it's a common Python application that's

24 used to manage bitcoins. So we used commands that are commonly

25 used by all the bitcoin users.

F1tgulb5   Yum -

1   Q.   And you don't have any notes of the work that you did?

2   A.   It's back in my office.

3   Q.   You do have notes?

4   A.   Well, the program itself.

5   Q.   So you have notes of what you went through to accomplish

6   this, right?

7   A.   It would be the logic within the matching.

8   Q.   And it was important for you to have help in this project,

9   right?

10   A.   In the amount of time that we needed to do the analysis,

11   yes.

12   Q.   Well, could a layperson have done it just running off the

13   top of their head?

14   A.   It may be time-consuming, but every information that we

15   used, well, we had the public addresses for all of the

16   defendant's laptop, so that's not available to the public but

17   we have it because the private keys were found in his laptop.

18   Q.   But we had someone with a doctorate, correct, in cryptology

19   working on this project with you, right?

20   A.   Right, it's easy as going to blockchain.info and typing

21   those addresses to see if you could locate a transaction that

22   you see --

23   Q.   And how long would it take you to type in all of the

24   addresses?

25   A.   It's time-consuming. That's why we had two people working

F1tgulb5   Yum -

1   on it.

2   Q.   Figure with two people, you would have done it in a week

3   without any of the computer work that you did, without any of

4   your knowledge and experience that you bring to the project?

5   A.   As a manual process, no.   You can't do that as a manual

6   process.

7   Q.   So then my question is -- withdrawn.   So you do have notes

8   and a progression of what you did, right?

9   A.   Well, the notes would be the files on the computer where

10   this analysis was done.

11   Q.   Now, when you seized the bitcoins from the servers, right,

12   in fact, the FBI didn't even have a protocol for establishing a

13   wallet where to put seized bitcoins, right?

14   A.   Correct.

15   Q.   You had to create that?

16   A.   Yes.

17   Q.   You talked about the concept of a wallet, right, multiple

18   wallets, multiple wallets and multiple addresses within

19   wallets, right?

20   A.   Right.

21   Q.   You know what I'm talking about.   So, you can't tell where

22   a particular wallet was created, correct?

23   A.   Correct.

24   Q.   It can move from computer to computer, correct?

25   A.   Yes, it can.

1   Q.   And you can also move an address from one wallet to another

2   wallet, correct?

3   A.   Yes, you can.

4   Q.   So you can't say how long any of the addresses of the

5   wallets were on Mr. Ulbricht's computer other than the day he

6   was arrested, right?

7   A.   Can you repeat the question.

8   Q.   Sure. You can't say when other than the day that

9   Mr. Ulbricht was arrested or if those wallets or those

10 addresses were on that laptop, other than the day he was

11 arrested?

12 A.   Yes, but there -- the wallet files are computer files in

13 itself. So there is a last-access date of that file. And some

14 of them dated prior to the day of the arrest. Some, months

15 prior; some, weeks prior.

16 Q.   Now, also the wallet that the bitcoins were in on

17 Mr. Ulbricht's laptop, the 144,000 bitcoins, right --

18 A.   Right.

19 Q.   -- that was a hot wallet, right, as opposed to a cold

20 storage wallet, right? It had the bitcoin program in it. It

21 was a hot wallet by definition, right?

22 A.   It's only hot if it's online. And the wallet that

23 contained the most number of keys on the defendant's laptop, I

24 don't believe that was synchronized to the block chain until

25 August.

F1tgulb5   Yum -

1   Q. I'm not talking about keys. I'm talking about bitcoins

2   themselves.

3   Bitcoins themselves, the wallets -- the addresses

4   within the wallets that the bitcoin were in, they were

5   basically in one wallet, correct?

6   A. The majority came from one wallet.

7   Q. Right. And that wallet had a bitcoin program running in

8   it, right?

9   A. Yes, but the program hasn't run since August of 2013,

10   so -- it will be a cold wallet at that point.

11   Q. But isn't a cold wallet where it's not connected to a

12   program where you can actually take the wallet, put it in a

13   file or in a folder or somewhere else on the computer and

14   extract the program -- extract it from the program so that it

15   can't execute any functions, right?

16   A. Well, a cold wallet is something that's not online. So if

17   the wallet's last access date was August 2013, it hasn't been

18   online since August 2013; therefore, from August until October,

19   it's a cold wallet because it never went online.

20   Q. But it still has a program in it, right, and it's still

21   capable of execution?

22   A. Right, but it didn't execute because it would have updated

23   that last-access date on the wallet.

24   Q. But if someone doesn't use their wallet, it doesn't mean

25   it's a cold wallet; it can still be a hot wallet. You're just

1   not using it, right?

2   A.   No, not correct.

3   MR. TURNER: Objection; asked and answered.

4   THE COURT: I'll allow it.

5   A.   A hot wallet is a wallet that is currently connected to the

6   Internet.

7   Q.   At that time? At the very time?

8   A.   At the very time.

9   Q.   That's your definition?

10 A.   Yes, it is.

11 Q.   Okay. And how many bitcoin cases did you have before this

12 one?

13 A.   This was a second case I believe.

14 Q.   Now, you talked about identifying servers and identifying

15 bitcoin server, right, and identifying the servers from the

16 Philadelphia servers, right?

17 A.   Right.

18 Q.   You testified about that. What you saw from the code was

19 only an onion address, right? In other words, looking back to

20 find the servers, correct, it wasn't an IP address. It was --

21 A.   I'm sorry. Which address and which server are you

22 referring to?

23 Q.   The server to which the backup data was exported to the

24 jtan -- the Philadelphia server, right?

25 A.   Correct.

F1tgulb5   Yum -

1   Q. From the Iceland server, right?

2   A. Yes.

3   Q. Now, what you saw there when you're looking to find that is

4   an onion address, right, an onion url, dot-onion url, correct?

5   A. I was brought onto the case around that time, and I

6   received an IP address. And my -- the investigative team,

7   before I joined, they were the ones who did the analysis, so I

8   can't speak to what allowed me to receive that IP address, but

9   I received that IP address. Nothing else.

10   Q. Now, the servers were first -- you went in October to

11   Iceland, correct?

12   A. Correct.

13   Q. And to be there at the time of the arrest to shut down the

14   servers, correct?

15   A. Yes.

16   Q. And to put the seizure banner up, we saw at Exhibit 600,

17   right?

18   A. Right.

19   Q. The government had access to the servers -- the U.S.

20   government had access to the servers in July of 2013, correct?

21   A. That's what I've been told --

22   MR. TURNER: Objection; foundation.

23   THE COURT: Sustained.

24   Q. Now, isn't it true that a Silk Road user would have

25   communications -- withdrawn.

1   A Silk Road user would have transactions with the Silk

2   Road wallet, correct, and their own wallets, right?

3   MR. HOWARD: Objection; beyond the scope.

4   THE COURT: Overruled.

5   A. I'm sorry. Can you clarify.

6   THE COURT: Let's not make a hypothetical. Why don't

7   you ask him about actual things he may have seen.

8   MR. DRATEL: Sure.

9   Q. Silk Road users, in the context of how the bitcoin server

10   worked on Silk Road, --

11   A. Okay.

12   Q. -- Silk Road users, a purchaser of a product off of Silk

13   Road, would have a wallet on the Silk Road server, correct?

14   MR. TURNER: Objection to foundation.

15   THE COURT: Overruled.

16   A. I don't believe they have a wallet, but they're given an

17   address where they could deposit the bitcoins that they

18   personally own.

19   Q. Right. And then they could withdraw those bitcoins,

20   correct?

21   A. I believe so; yes.

22   Q. And those bitcoins being withdrawn would show up as a

23   transaction on the block chain from the Silk Road server to one

24   of their addresses in a bitcoin wallet, correct?

25   A. Can you repeat that, please.

F1tgulb5   Yum –

1   Q.   Sure.   That if a Silk Road user puts --

2   THE COURT: Ask it in terms of what he's observed.

3   Q.   From what you know about the operation of the server with

4   respect to bitcoins on Silk Road, that a user would fund his

5   address, right, on Silk Road, correct?

6   A.   Correct.

7   Q.   And then if they decided to withdraw those bitcoins rather

8   than using them to purchase at some point if they had a balance

9   left, they could withdraw those bitcoins and that would show up

10   as a transaction on the block chain from Silk Road wallets,

11   correct?

12   A.   Correct.

13   Q.   In fact, someone could use Silk Road as a wallet itself in

14   that forum, right?

15   A.   I guess you could, but it's kind of dangerous to trust your

16   bitcoins in someone else's wallet management.

17   Q.   But it could be done?

18   A.   It could be done, but when we seize government -- when the

19   government seized the Silk Road server, anyone who left their

20   bitcoins in their Silk Road address for the purchase of buying

21   drugs, they lost all their bitcoins, so I wouldn't maintain my

22   bitcoins that way.

23   MR. DRATEL: One moment.

24   THE COURT: Yes.

25   Q.   Now, part of your investigation, part of what you were

F1tgulb5   Yum -

1   doing is looking at the movement of bitcoins back and forth,

2   correct, from Silk Road servers, right?

3   A.   Not back and forth. Just one direction from Silk Road to

4   the Ross' laptop.

5   Q.   And you mentioned --

6   THE COURT: I want to make sure that you don't speak

7   over the witness.

8   MR. DRATEL: I'm sorry.

9   Q.   But you mentioned that the amount that was in the FBI

10   wallet was actually larger than the amount that was in -- that

11   was transferred from the laptop, right?

12   A.   Yes. So once the transaction -- once the seizure happened,

13   FBI address made it onto the block chain and transaction of

14   that size normally gets noticed by a lot of bitcoin users. So

15   once that happened, the government seizure address was publicly

16   known at that point. And just like -- just like an email,

17   someone could send you an email and you send end up receiving

18   it, whether it's spam or not. So we received a lot of small

19   transactions that also came into the government wallet --

20   government address.

21   Q.   Bitcoin?

22   A.   Small -- fractions of bitcoins.

23   Q.   But you don't know where they were from necessarily, right,

24   you didn't track them all down?

25   A.   I'm sorry. What was that?

1 Q. You didn't track down where they all came from?

2 A. No, I did not.

3 Q. So when you say spam or something, that's just your

4 speculation, right?

5 A. Right.

6 Q. That's just a theory. You don't know where those -- those

7 bitcoins came from after Mr. Ulbricht's arrest, right?

8 A. Right.

9 Q. And in fact, when you talked about large amounts being

10 noticed on the block chain by the public, in fact, you -- six

11 weeks after Mr. Ulbricht was arrested, you noticed 195,000

12 bitcoins being moved, right?

13 A. 195,000 bitcoins?

14 Q. Yes.

15 A. I don't recollect that.

16 Q. I'll show you what's marked as 3511-38 and ask you if that

17 refreshes your recollection. That November 22nd, 2013, there

18 was a 195,000 bitcoin transaction that was then broken down

19 quickly into three different transactions, right?

20 A. I'm sorry. I was reading this. Could you give me just one

21 second.

22 Q. I'm sorry.

23 A. Yes. You may proceed.

24 Q. I'm sorry. It was 35, not 38. Thank you. It's the wrong

25 one. I'm giving you 35 instead to read.

F1tgulb5   Yum -

1 A. Sure.

2 Q. No wonder you're confused. Does that refresh your

3 recollection: November 22nd, 2013, that there was a

4 transaction of 195,000 bitcoin that that was then quickly

5 broken up into three smaller transactions?

6 A. It looks familiar; yes.

7 Q. Now, you you're at something called FTI Consulting, right?

8 A. Yes.

9 Q. And you left the government to join that organization,

10 right?

11 A. Yes.

12 Q. The amount of money that the company's been paid already

13 for this work is $55,000, right?

14 A. We haven't been paid yet. I'm not sure what the bill is

15 going to --

16 Q. Is that the bill you've run up, $55,000, right?

17 A. I'm not sure of the exact amount, but I think it's

18 somewhere around there.

19 Q. And this was an important case, right, for you and your

20 career?

21   MR. HOWARD: Objection.

22   THE COURT: You mean in his career with the government

23 or at FTI?

24   MR. DRATEL: Well, both, your Honor.

25   THE COURT: All right.

1   Has it been important in your career in both jobs?

2   You may answer.

3   A. It was a significant case considering that bitcoin was

4   never involved in a criminal case like this, but I've worked on

5   many other cases that were very interesting as well.

6   Q. And it's also true that another agent closely involved in

7   this case, Christopher Tarbell, also went to FTI after the

8   arrest in this case, correct?

9   A. Yes.

10   MR. HOWARD: Objection; beyond the scope.

11   THE COURT: Overruled.

12 BY MR. DRATEL:

13 Q. The answer is yes, right?

14 A. Yes.

15 Q. And you left during this -- after the arrest and before the

16 trial, right, and you went to FTI?

17 A. Yes.

18   MR. DRATEL: I have nothing further.

19   THE COURT: Thank you.

20   Anything further from you, Mr. Howard?

21   MR. HOWARD: No, your Honor.

22   THE COURT: Thank you. You may step down, Mr. Yum.

23   THE WITNESS: Thank you.

24   (Witness excused)

25   THE COURT: Would the government like to call their

F1tgulb5   Yum –

1   next witness, please.

2   MR. HOWARD: The government calls Brian Shaw.

3   THE COURT: Mr. Shaw to the stand, please.

4   THE DEPUTY CLERK: Raise your right hand.

5   (Witness sworn)

6   THE COURT: Mr. Howard, you may proceed, sir.

7   BRIAN SHAW,

8   called as a witness by the Government,

9   having been duly sworn, testified as follows:

10 DIRECT EXAMINATION

11 BY MR. HOWARD:

12 Q. Good afternoon, Mr. Shaw.

13 A. Good afternoon.

14 Q. What do you do for a living?

15 A. I am an info sec engineer.

16 Q. In your work, do you have any relationship with the FBI?

17 A. Yes, I do.

18 Q. What is that relationship?

19 A. I am a government contractor to the FBI.

20 Q. How long have you been a government contractor to the FBI?

21 A. Since 2001.

22 Q. And what are your roles and responsibilities as a

23 contractor?

24 A. My roles and responsibilities include collecting,

25 processing and analyzing computer data.

F1tgulb5   Shaw – direct

1   Q.   What is your educational background?

2   A.   I have a Bachelor's degree in Electrical Engineering from

3   Northwestern and a Master's degree in Computer Engineering from

4   Virginia Tech.

5   Q.   Are you familiar with computer databases?

6   A.   Yes, I am.

7   Q.   We'll talk more about databases in detail later, but can

8   you provide a short description of what that is.

9   A.   Sure. Computer database is a way to store structured data

10 in a format that is easy to retrieve it later.

11 Q.   Do you have any specialized training in reviewing and

12 analyzing computer databases?

13 A.   Yes, I do.

14 Q.   And what is that?

15 A.   Request I have completed a training class in SQL, which is

16 structured query language, which is the language used to

17 interact with databases.

18 Q.   Now, in your role as a contractor with the FBI, do you have

19 any role in FBI investigations?

20 A.   Yes, I do.

21 Q.   What is that role?

22 A.   I assist in analyzing and collecting and processing data in

23 support of investigations.

24 Q.   And in the course of your career as a consultant to the

25 FBI, approximately how many computers have you examined?

1   A.   I have supported over 100 investigations with digital

2   evidence.

3   Q.   Have you been involved in the review of computer evidence

4   collected during the Silk Road investigation?

5   A.   Yes, I have.

6   Q.   And, what your -- what is your involvement been

7   specifically?

8   A.   I've had two different roles: One was fairly early on

9   where I was given copies of the databases collected from the

10 investigation. And taking those copies of the databases, I

11 assisted in creating intelligence packages to help support

12 field investigations. Those intelligence packages, for

13 example, with the DEA came to us and asked could we have

14 information on user Joe X, Y, Z. We would create an

15 intelligence product to then send back to the field

16 investigator so that they could work on their investigation.

17   More recently, I was asked to take a look at two of

18 the servers that were seized as a part of the investigation.

19   MR. HOWARD: Your Honor, may I approach.

20   THE COURT: You may.

21 Q.   I have just handed you Government Exhibit 603 and 604,

22 which have already been admitted into evidence.

23 A.   Yes.

24 Q.   Do you recognize those exhibits?

25 A.   Yes, I do.

1   Q.   What are they?

2   A.   These are the copies of the servers that I received copies

3   of to analyze.

4   Q.   And how do you recognize them?

5   A.   They have my initials on them.

6   Q.   Did you review the files on the servers themselves or did

7   you review copies of those servers?

8   A.   I reviewed from a copy of these images here.

9   Q.   Now, what, if anything, did you do to confirm that the

10   copies you reviewed were true and accurate copies of the

11   original servers?

12   A.   I verified the hash values of -- from the original servers

13   to the copies that I was analyzing.

14   Q.   And what kind of hash values did you run?

15   A.   The MD5 and the SHA1 hash values.

16   Q.   And real briefly, what a hash value?

17   A.   A hash value is, in essence, a fingerprint of a file so it

18   helps you to uniquely identify a file and also to detect if any

19   changes have occurred.

20   Q.   Mr. Shaw, can you please flip in your binder to what has

21   been premarked as Government Exhibits 900A and 900B.

22   A.   Yes.

23   Q.   Do you recognize these exhibits?

24   A.   Yes, I do.

25   Q.   What are they?

F1tgulb5   Shaw - direct

1   A.   These are screenshots of the MD5 and the SHA1 values of the

2   images that I analyzed.

3   Q.   Did you take these screenshots?

4   A.   Yes, I did.

5   MR. HOWARD: The government offers Government Exhibits

6   900A and 900B.

7   MR. DRATEL: No objection.

8   THE COURT: Received.

9   (Government's Exhibits 900A, 900B received in

10   evidence)

11   MR. HOWARD: Mr. Evert, could you publish 900A.

12   Q.   Mr. Shaw, is this the screenshot of the hash values for one

13   ever those two servers?

14   A.   Yes, it is.

15   Q.   Do you know which server it was?

16   A.   I believe this was the server that hosted the web server

17   and the Marketplace.

18   MR. HOWARD: Mr. Evert, could you please publish

19   Government Exhibit 900B.

20   Q.   And what is this?

21   A.   This is the hash values from the second server that hosted

22   backup copies of data from the Marketplace.

23   Q.   And do you -- you compared these values with the copies in

24   the original log files for these servers?

25   A.   That is correct.

1   Q.   Did they match?

2   A.   Yes, they did.

3   Q.   And what does that indicate?

4   A.   That indicates that there was no change between the

5   original and the copy that I was given.

6   Q.   Can you please flip in your binder to what has been

7   premarked for identification purposes as Government

8   Exhibit 901.

9   A.   Okay.

10   Q.   Do you recognize this exhibit?

11   A.   Yes, I do.

12   Q.   And what is it?

13   A.   This is a screenshot from a tool called FTK Imager and

14   it's -- it shows information about a file called

15   authorized_keys.

16   Q.   Did you take the screenshot?

17   A.   Yes, I did.

18   Q.   And where was this file extracted from?

19   A.   This was extracted from the primary server that hosted the

20   Marketplace.

21   MR. HOWARD: The government offers Government

22   Exhibit 901.

23   MR. DRATEL: No objection, your Honor.

24   THE COURT: Received.

25   (Government's Exhibit 901 received in evidence)

F1tgulb5   Shaw - direct

1   Q. Mr. Shaw, what is depicted in the top right-hand corner of

2   this exhibit?

3   A. That is the file name of the file being reviewed.

4   Q. It's called authorized_keys?

5   A. Correct.

6   MR. HOWARD: Could we zoom out.

7   Q. What's depicted on the bottom right-hand corner of the

8   screen?

9   A. That is the content of the file or at least part of the

10   content.

11   Q. Now, are you familiar with this kind of file?

12   A. Yes, I am.

13   Q. And what is it?

14   A. It's part of an SSH key.

15   Q. And, what an SSH key?

16   A. An SSH keys are used for automatic mated authentications.

17   Normally, when you connect to a server you have to type in your

18   username and password. System administrators don't like to

19   have to remember all of their usernames and passwords for all

20   of the systems that they work on, so they like to set up an

21   automated process for handling this authentication.

22   So what you do is you put a copy of your SSH key on

23   the remote server that you're administering. And when you go

24   to connect to the remote server, it does a comparison,

25   three-part comparison to see if you're authorized to access the

F1tgulb5   Shaw - direct

1 system.

2 Q. And so what is this first part -- let's look at the first

3 line. There's a long series of characters here, letters and

4 numbers.

5 A. Yes.

6 Q. What is that?

7 A. That's the tail end of the key that is used as part of the

8 authentication.

9 Q. And what is frosty@frosty to the right of that?

10 A. That is -- the first "frosty" denotes the username and the

11 second "frosty" denotes the computer name, and those are taken

12 from the system you are coming from.

13 Q. So what is required for this key to work?

14 A. In order for this work, you must be coming from a

15 computer -- let's see if I can use this -- you must be coming

16 from a computer with a computer name frosty, that's the second

17 part there. And the username that you are, again, coming from

18 must be the first frosty here.

19   And then the comparison -- once those two match, a

20 comparison is done to see if the keys are also a pair, and if

21 so, then you're automatically authenticated and allowed into

22 the server.

23 Q. If any of those parts are not correct, then what happens?

24 A. You get a login error.

25 Q. And here there is a second line here. What does it

1   indicate?

2   A.   That indicates that there was a second key that was

3   authorized access to this server. Again, the username in this

4   case would be "root" and the computer name would be "BCW."

5   MR. HOWARD: Now, Mr. Evert, could you please publish

6   Government Exhibit 241, a file that was recovered from the

7   defendant's computer and zoom in on the entries from March 25

8   through March 27, 2013. "03/25/2013. Server was ddosed,

9   meaning someone knew the real IP. I assumed they obtained it by

10 becoming a guard node. So, I migrated to a new server and set

11 up private guard nodes. There was significant downtime and

12 someone has mentioned that they discovered the IP via a leak

13 from lighttpd.

14   03/26/2013: Private guard nodes are working ok. still

15 buying more servers so I can set up a more modular and

16 redundant server cluster. redid login page.

17   03/27/2013: Set up servers"

18 Q.   Mr. Shaw, from that FTK Imager, does it indicate the last

19 date that that file was changed?

20 A.   Yes. It has a "date modified" date of March 26, 2013.

21 Q.   Now, focusing on what you reviewed the Marketplace server

22 did you review the contents of that computer server?

23 A.   Yes, I did.

24 Q.   Did you discover if any website was running from that

25 server?

F1tgulb5   Shaw – direct

1   A.   Yes, I did.

2   Q.   What website did the server appear to be running?

3   A.   The Silk Road Marketplace.

4   Q.   Now, based on your review of the files on that server, were

5   you able to observe what the website looked like at around the

6   time that it was seized?

7   A.   Yes, I was. I was able to recreate the web server. I took

8   database files, the files that contained images and along with

9   some of the code that was used to run the web server and I

10   copied those, that data, moved it to a clean computer image

11   that I created and I was able to re-instantiate, recreate what

12   the web server would have looked like on my own local computer

13   completely isolated from any networks.

14   Q.   So no one else could access --

15   A.   Correct.

16   Q.   -- the simulation of the Silk Road website?

17   A.   Correct.

18   Q.   Now, if you can please flip in your binder to what has been

19   marked for identification purposes as Government Exhibit 910.

20   A.   Yes.

21   Q.   Do you recognize what this is?

22   A.   Yes, I do.

23   Q.   What is this?

24   A.   It's a screenshot from my recreated web server.

25   Q.   Did you take this screenshot?

1   A.   Yes, I did.

2   MR. HOWARD: Government offers Government Exhibit 910.

3   MR. DRATEL: No objection.

4   THE COURT: Received.

5   (Government's Exhibit 910 received in evidence)

6   Q.   Mr. Shaw, what page of the Silk Road website does this

7   depict as you recreated it?

8   A.   This is the page that loads after you log in.

9   Q.   So here in the upper left-hand corner we see Silk Road

10   Anonymous Market.   If we can zoom out, Mr. Evert and maybe zoom

11   into the top two rows here.   We have various photographs and

12   words underneath, for example, front seller cocaine 0.5 grams,

13   500 milligrams, .7216 bitcoins.   Another example, we have a

14   picture and a tilde, 100 percent pure MDMA capsules X4 and a

15   bitcoin price underneath, correct?

16   A.   Correct.

17   MR. HOWARD: Can we zoom out, please.   Can we zoom in

18   on the top right-hand corner of the screen.   Here we have the

19   words "A few words from the Dread Pirate Roberts," and an

20   avatar to the right?

21   A.   Correct.

22   Q.   And here it says "Hi, FBINY."   What is FBINY?

23   A.   In order to get into the recreated server, I had to create

24   a login account.   I chose the name FBINY.

25   Q.   That was a new user you created for the purpose of making

F1tgulb5   Shaw – direct

1 these screenshots?

2 A. That is correct. That user did not exist prior to me

3 recreating the website.

4   MR. HOWARD: Could you zoom out, please. Could you

5 zoom in on the bottom right-hand corner here.

6 Q. You see the word "support" here?

7 A. Yes, I do.

8 Q. What is that?

9 A. That is a hyperlink to a new page.

10 Q. Did you try clicking on the link?

11 A. Yes, I did.

12 Q. What happened?

13 A. A new page loaded with support information.

14 Q. Would you please flip in your binder to what's been marked

15 for identification purposes as Government Exhibit 918.

16 A. Okay.

17 Q. Do you recognize this exhibit?

18 A. Yes, I do.

19 Q. And what is it?

20 A. This is a screenshot that I took of the support page.

21 Q. This is the page that happened after you clicked on the

22 support link?

23 A. Correct.

24   MR. HOWARD: The government offers Government

25 Exhibit 918.

1   MR. DRATEL: Your Honor, hearsay in terms of for the

2   truth.

3   THE COURT: Is it offered for the truth?

4   MR. HOWARD: No, your Honor.

5   THE COURT: Then that objection is overruled.

6   Government Exhibit 918 is received.

7   (Government's Exhibit 918 received in evidence)

8   THE COURT: You may proceed.

9   MR. HOWARD: Here it says "Follow the steps below to

10   get the help you need."

11   Reading the titles: Step one, look for your question

12   in the FAQ. Step two, search the forum. Step three, post your

13   question in the customer support section of the forum. Step

14   four, open a support ticket. Underneath that it says "If all

15   else fails, you can message support as a last resort and an

16   administrator will take care of you personally. Support

17   tickets should only be used when absolutely necessary." And

18   then there's a link -- the words there "Contact customer

19   support."

20   Mr. Evert, can you please publish 910 again. Can you

21   zoom in on the top of the list right here.

22   Q. You see here where it says "drugs"?

23   A. Yes.

24   Q. Is that also a link?

25   A. Yes, it is.

1   Q. Did you click on the link?

2   A. Yes, I did.

3   Q. And what happened when you clicked on the link?

4   A. It took me to a page with products being offered for sale

5   labeled drugs.

6   Q. Now, Mr. Shaw, could you please flip in your binder to

7   what's been marked for identification purposes as Government

8   Exhibit 911.

9   A. Okay.

10 Q. Do you recognize this exhibit?

11 A. Yes, I do.

12 Q. What is that?

13 A. This is a screenshot of the page that loaded when you

14 clicked on the link "drugs."

15 Q. Did you take this screenshot?

16 A. Yes, I did.

17   MR. HOWARD: The government offers Government

18 Exhibit 911.

19   MR. DRATEL: Same objection.

20   THE COURT: Overruled. Received.

21   (Government's Exhibit 911 received in evidence)

22   MR. HOWARD: Can we zoom in real fast on this little

23 area here, right here. It says "sort by bestselling."

24 Q. Can you explain that?

25 A. Yes. You had at least two options for sorting the

1   information. In this case, it was sorted by bestselling.

2   Q. What is the other option?

3   A. I believe it was "recent."

4   MR. HOWARD: Can you zoom out, Mr. Evert. And zoom in

5   on the first few listings.

6   Q. Heroin China White, 1 gram, U.S. only, 10X, 140mg pure 84

7   percent MDMA capsules, high quality number four heroin all rock

8   directly from Key. 100 grams, 72 percent pure speed. East

9   Coast Style Heroin Stamps x10, and then in parentheses three

10   free. And the seller is listed as deezletime, correct?

11   A. Correct.

12   MR. HOWARD: Now, can we zoom out and look on the

13   upper left-hand corner of the page.

14   Q. There's various -- are these all links on the left-hand

15   side of the page by the way?

16   A. Yes. They're all hyperlinks.

17   Q. There are various links: Cannabis, Ecstasy, opioids and

18   others. Did you try to click on all of these links?

19   A. Yes, I did.

20   Q. Did they take you to other pages on the Silk Road website?

21   A. Yes, they did.

22   Q. Please take a moment and look in your binder to what's been

23   marked for identification purposes as Government Exhibits 911A

24   through 911B, and let me know when you're done.

25   A. Okay.

1   Q.   Do you recognize what these are?

2   A.   Yes, I do.

3   Q.   And what are they?

4   A.   These are screenshots taken from pages that loaded after

5   clicking on some of these links on the left side.

6   Q.   Did you take these screenshots?

7   A.   Yes, I did.

8   MR. HOWARD: The government offers Government Exhibits

9   911A through 911D.

10   MR. DRATEL: The same objection.

11   THE COURT: Okay.   The objections are overruled.

12   Those are received.

13   (Government's Exhibits 911A-911D received in evidence)

14   MR. HOWARD: Mr. Evert, can you please publish

15   Government Exhibit 911A.

16   Q.   Mr. Shaw, do you recognize what this is?

17   A.   Yes, I do.

18   Q.   What is this?

19   A.   This is the page that loads when you click on the link

20   "cocaine."

21   Q.   There are a bunch of cocaine listed on this page, correct?

22   A.   That's correct.

23   Q.   And is this a subcategory of drugs?

24   A.   It's a subcategory of "drugs" and further a subcategory of

25   "stimulants," yes.

F1tgulb5   Shaw – direct

1   Q.   Please publish Government Exhibit 911B, please. And what

2   does Government Exhibit 911B depict?

3   A.   This is the page that loads when you click on the link

4   "heroin."

5   Q.   Is this another subcategory of drugs?

6   A.   Yes, it is.

7   Q.   Can you please publish Government Exhibit 911C, please.

8   THE COURT: We haven't got to C yet.

9   THE DEPUTY CLERK: A through D.

10   MR. HOWARD: A through D. Then A through D are

11   received.

12   Q.   What is this page, Mr. Shaw?

13   A.   This is the page that loaded when you clicked on the link

14   "LSD."

15   Q.   Will you please publish Government Exhibit 911D as in dog,

16   please. And, what this page, Mr. Shaw?

17   A.   This is the page that loaded when you clicked on the link

18   "meth."

19   MR. HOWARD: Mr. Evert, can we zoom in on the top

20   listing here.

21   Q.   It says 3.5 grams ball in parentheses, pure crystal

22   methamphetamine; is that correct?

23   A.   Correct.

24   MR. HOWARD: Mr. Evert, could you please publish

25   Government Exhibit 910 again. Could we zoom in on this part of

1   the page down to here.

2   Q.   Mr. Shaw, do you see the link called "forgeries" here?

3   A.   Yes, I do.

4   Q.   Did you try clicking on that link?

5   A.   Yes, I did.

6   Q.   And what happened when you clicked on that link?

7   A.   It took me to a page of listings of various forgery items

8   to include passports and fake IDs.

9   Q.   Mr. Shaw, can you please flip to Government Exhibits 913

10 and 914 in your binder.

11 A.   Okay.

12 Q.   Do you recognize what these exhibits are?

13 A.   Yes, I do.

14 Q.   And what are they?

15 A.   These are the pages that loaded when I went to the category

16 "fake IDs" and "passports," both under the category

17 "forgeries."

18 Q.   Did you take these screenshots?

19 A.   Yes, I did.

20   MR. HOWARD: The government offers 913 and 914.

21   MR. DRATEL: The same objection; for the truth.

22   THE COURT: What was the other word?

23   MR. DRATEL: That if it's coming in for the truth,

24 it's hearsay.

25   THE COURT: The objection is overruled.   GX 913 is

F1tgulb5   Shaw - direct

1   received and 914.

2   (Government's Exhibits 913, 914 received in evidence)

3   Q. Mr. Shaw, what is this?

4   A. This is the page that loaded when you clicked on the link

5   "Fake IDs."

6   MR. HOWARD: Could we zoom in on the first few rows,

7   please, Mr. Evert.

8   Q. Here we see IDs from Ohio, Illinois and I guess two from

9   Illinois, correct?

10 A. Correct.

11   MR. HOWARD: Mr. Evert, could you please publish

12 Government Exhibit 914.

13 Q. And what does this page depict?

14 A. This is the page that loaded when you clicked on the link

15 "passports."

16   MR. HOWARD: Let's zoom in on the two -- the top two

17 listings, please.

18 Q. Here we have an E.U. passport listing, a USA passport

19 listing and a UK passport listing, correct?

20 A. Correct.

21 Q. And Mr. Shaw, did you review some of the individual

22 listings within the forgeries category?

23 A. Yes, I did.

24 Q. Could you please flip through what's been premarked as 915A

25 through 915G as in George.

F1tgulb5   Shaw - direct

1   A.   Okay.

2   Q.   Do you recognize what these are?

3   A.   Yes, I do.

4   Q.   What are they?

5   A.   These are screenshots of items that were offered for sale

6   under the category of "fake IDs" and "fake passports."

7   Q.   Did you take these screenshots?

8   A.   Yes, I did.

9   MR. HOWARD: The government offers 915A through 915G

10   as in George.

11   MR. DRATEL: Same objection, your Honor, with respect

12   to the truth of the matter.

13   THE COURT: All right.   Those objections are

14   overruled.   GX 915A through G received.

15   (Government's Exhibits 915A-G received in evidence)

16   MR. HOWARD: Mr. Evert, can you please publish 915A.

17   Q.   Here the title is listed "Real passport and new identity in

18   30 days, rush service."   Zoom in on the second paragraph there.

19   Actually, go down a little further to the next paragraph right

20   here.   It says here "The real ID we provide is a Dominican

21   Republic passport and citizenship.   It will have your picture

22   and the details of another real person which is your real new

23   identity.   We need to know (1) your approximate age, (2)

24   natural hair color, (4) natural eye color, (5) height and (6)

25   weight, (7) country you are from.   This is used to access the

1   info of a real person for your new identity, with info as close

2   to you as possible."

3   Mr. Evert, can you please publish Government

4   Exhibit 915B, please. The title here is "Europe, fake

5   documents passports ID, DL, Diplomas! Passports Denmark

6   Latvia, Poland, Sweden, Holland, Lithuania."

7   Down here it says "USA, DL (PA, FL IL, NJ) all

8   security UV, helograms, barcode, magnetic line," correct?

9   A. Correct.

10   MR. HOWARD: Mr. Evert, can you please publish 915C,

11   please. Zoom in on the top.

12   Q. This says here "New York driver's license hologram plus

13   scannable," and the seller is KingOfClubs, correct?

14   A. Correct.

15   Q. Look at the instructions.

16   MR. HOWARD: Mr. Evert, would you please publish

17   Government's Exhibit 915D as in dog, please.

18   Q. This is a similar listing for a Pennsylvania driver's

19   license, Mr. Shaw?

20   A. Correct.

21   MR. HOWARD: Can you please publish Government

22   Exhibit 915E.

23   Q. And what is this a listing for, Mr. Shaw?

24   A. This is a listing for a Tennessee driver's license.

25   MR. HOWARD: Mr. Evert, can you please publish

F1tgulb5   Shaw - direct

1   Government Exhibit 915F.

2   Q.   Mr. Shaw, what is this a listing for?

3   A.   It's a listing for a New south wales driving license.

4   Q.   Would you publish 915G, please. And what is this a listing

5   for?

6   A.   A forged Social Security card.

7   MR. HOWARD: Zoom out, please. Zoom this. This is a

8   listing for a forged social security card. At the end the last

9   sentence it says "In addition if you assume another identity

10 and all you have in your wallet is a fake ID and some cash it

11 looks a little empty and suspicious. Having more forms of ID

12 and having more cards to pull it up makes it look real so buy

13 this and more of my forged items will build a solid cover

14 identity. Below is the order form."

15 Q.   Mr. Shaw, during your review of the contents of the Silk

16 Road website as it existed when it was seized, did you find any

17 listings for computer hacking tools and service?

18 A.   Yes, I did.

19 Q.   Mr. Shaw, could you please take a moment and flip through

20 the binder to what's been marked as Government Exhibits 916A

21 through Z for identification purposes.

22 A.   Okay.

23 Q.   What are these?

24 A.   These are listings for various hacking tools and services

25 that were offered for sale on the Silk Road Marketplace.

F1tgulb5   Shaw – direct

1   Q.   Were you involved in taking these screenshots?

2   A.   Yes, I was.

3   MR. HOWARD: The government offers 916A through 916Z.

4   MR. DRATEL: Same objection.

5   THE COURT: All right.   Those objections are

6   overruled.   GX 916A through Z are received.

7   (Government's Exhibits 916A–Z received in evidence)

8   Q.   We won't go through all of them.   Let's look through a

9   selection of them, Mr. Shaw.

10 A.   Okay.

11 Q.   Can we look at 916E, please.   Here the title is "Android

12 RAT plus tutorial"?

13 A.   Correct.

14   MR. HOWARD: Zoom down to description, that far.   "The

15 description of this listing will be for an Android RAT and

16 setup tutorial.   Please only purchase if you have previous

17 experience with RATS.   Here are some of the media it's capable

18 of stealing: Contacts, personal information, phone call logs,

19 pictures, SMS messages (sent & received) WhatsApp messages."

20 A.   Correct.   (Continued on next page)

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1   MR. HOWARD: Mr. Evert, could you please publish

2   Government Exhibit 916F, please.

3   BY MR. HOWARD:

4   Q. This is for a remote administration tool, correct?

5   A. Correct.

6   Q. Let's look at the first line.

7   The description is: "This is a remote administration

8   tool. Used for hacking computers. You send a file to a

9   computer and then you control it." Correct?

10 A. Correct.

11 Q. Look at 916I, please. It is called an "Email account

12 cracker – best price on SR."

13 A. Correct.

14 Q. Let's look at the description.

15   "This tool will allow you to crack nearly any email

16 account. All you need to know is the smtp server and port (a

17 quick Google search can solve that). It's extremely easy to

18 use and I'll even throw in a little .gif image showing you how

19 to use it. This can crack gmail, hotmail, yahoo email and any

20 others you need."

21 A. Correct.

22 Q. Let's at one last one, 916K.

23   It says: "I will crack any username+password."

24 A. Correct.

25 Q. And the description: "This listing will be for a list of

1   contacts that can crack random accounts on any website that has

2   a login page. Please note that I will not crack any

3   finance-related website accounts. If you are interested in

4   having a specific account cracked, get in touch with me and we

5   can make a deal. If you have any questions, feel free to send

6   me a message. Sniffsniff."

7   A. Correct.

8   MR. HOWARD: Mr. Evert, could we just go back to

9   Government Exhibit 910, please, and let's zoom in to the bottom

10   of the list.

11   Q. Do you see the money link, Mr. Shaw?

12   A. Yes.

13   Q. Did you try clicking on that one?

14   A. Yes, I did.

15   Q. What happened after you clicked on that one?

16   A. It took me to a page with various money listings.

17   Q. Would you flip in your binder at what has been marked for

18   identification purposes as Government Exhibit 917.

19   A. OK.

20   Q. Do you recognize what this is?

21   A. Yes, I do.

22   Q. And what is this?

23   A. This is the page that loaded after clicking on the link

24   "money."

25   Q. Did you take this screenshot?

1   A.   Yes, I did.

2   MR. HOWARD: The government offers 917.

3   MR. DRATEL: The same objection, your Honor.

4   THE COURT: All right.   The objection is overruled.

5   Government Exhibit 917 is received.

6   (Government's Exhibit 917 received in evidence)

7   Q.   Mr. Shaw, if you could please flip in your exhibit binder

8   to what has been marked for identification purposes as 917A

9   through 917F.

10   A.   OK.

11   Q.   Do you recognize these exhibits?

12   A.   Yes, I do.

13   Q.   And what are they?

14   A.   These are screenshots of items that were offered for sale

15   related to money, separate transactions.

16   Q.   Did you participate in the creation of these screenshots?

17   A.   Yes, I did.

18   MR. HOWARD: The government offers 917A through 917F.

19   MR. DRATEL: The same objection.   Hearsay.

20   THE COURT: All right.   Those objections are

21   overruled.   917A through F are received.

22   (Government's Exhibits 917A through F received in

23   evidence)

24   MR. HOWARD: Mr. Evert, could you please publish 917A,

25   please.

F1tdulb6   Shaw – direct

1   Q.   Here it says "$10,000 delivered," correct?

2   A.   Correct.

3   Q.   And photos of cash?

4   A.   Correct.

5   Q.   The description says: "$10,000 delivered to your doorstep

6   in the form of 100 $100 bills (or U.S. bills of your choosing).

7   You will be mailed genuine U.S. currency that has not been

8   altered or linked to criminal activity."

9   A.   Correct.

10   Q.   Can we look at 917B, please.

11   The title is "Vendors cash in UR coins 4 packs (3%

12   fee)," correct?

13   A.   Correct.

14   Q.   Let's look at the description.

15   "Hello my good friends! This is a listing for anyone

16   to cash in their coins for moneypaks, REloadits, Vanilla

17   Reloads, and netspends."

18   Now, here we have: "The rates are the same all the

19   way up no matter what, 3%.

20   "$500 pack costs $515 coins. $100 pack costs $103 in

21   coins. You get the picture."

22   A.   Correct.

23   Q.   Look at 917C, please.

24   The listing is called "Anonymous Visa ATM Card EUR USD

25   PLN + Bank ACC."

1 A. Correct.

2 Q. Let look at the first line here:

3   "Get your own anonymous reloadable ATM physical

4 plastic VISA debit card, with sealed PIN code, shipped by me

5 from EU, bank will never know your name."

6   Skip to 917E, please. The title is "$100 Green Dot

7 Moneypak," correct?

8 A. Correct.

9 Q. The description: "Optimal: Contact me on TorChat to

10 receive your code," and there are some letters and numbers. "I

11 need up to 24 hours to buy these at the store, then I'll just

12 PM you the card code and you can load it onto PayPal, credit

13 cards, online bank, or whatever as if you had bought it

14 yourself."

15   And, finally, let's look at 916F -- sorry, 917F. The

16 listing is "[BTC] Bicion Laundry (Highly Anonymous, Impossibl,"

17 correct?

18 A. Correct.

19 Q. Let's look at the first paragraph here.

20   "Ever worried & paranoid about your unaccounted dirty

21 money to be painful for you at some point? Then right now you

22 are in the right listing, buy this listing and PM me... I will

23 provide you fresh, washed, clean bitcoins in your BTC wallet in

24 just 24 hours, making it completely anonymous and never be able

25 to trace by using my own methods of mixing algorithm."

1   Mr. Shaw, can you please flip in your binder to what's

2   been marked for identification purposes as Government Exhibit

3   919.

4   A.   OK.

5   Q.   And what is this?

6   A.   This is a screenshot that I created of a page called

7   "Mastermind."

8   Q.   Did you take this screenshot?

9   A.   Yes, I did.

10   MR. HOWARD: The government offers Government Exhibit

11   919.

12   MR. DRATEL: The same objection.

13   THE COURT: Overruled.   Received.

14   (Government's Exhibit 919 received in evidence)

15   BY MR. HOWARD:

16   Q.   Mr. Shaw, you testified that the name of this page was

17   "Mastermind"?

18   A.   Correct.

19   Q.   Now, earlier you said that you had created the FBI NY

20   account to access the Web pages, correct?

21   A.   That is correct.

22   Q.   Were you able to access this page using the FBI NY account?

23   A.   No, I was not.

24   Q.   Would you please explain?

25   A.   Sure.   We were testing only one account that was able to

1   get to this page and that account was the Dread Pirate Roberts'

2   account. So I was unable to get to this page using my FBI NY

3   account, and I also tried a few of the other user accounts in

4   addition. I tried to use -- can you zoom in on the top,

5   please? Also, I tried to use the account Inigo, Libertas and

6   Cirrus, and none of those accounts were able to access this

7   page.

8   THE COURT: When you reach a logical stopping point,

9   we are going to take our break.

10   MR. HOWARD: This is absolutely perfect right now.

11   THE COURT: All right. Had you finished your answer?

12   THE WITNESS: Yes.

13   THE COURT: All right. Thank you.

14   Ladies and gentlemen, let's take our mid-afternoon

15   break, and when we come back we'll sit for the remainder of the

16   day. I want to remind you about the usual, not to talk to each

17   other or anybody else about this case. Thank you.

18   THE CLERK: All rise as the jury leaves.

19   (Continued on next page)

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1   (Jury not present)

2   THE COURT: Mr. Shaw, you can step down as well.

3   (Witness not present)

4   THE COURT: All right. Let's all be seated just for

5   one second.

6   How much more do you have of this witness? I am just

7   curious. I am not rushing you at all. I'm just wondering, do

8   you feel like you are moving fast? Do you feel like you are

9   moving at the pace that you had expected?

10   MR. HOWARD: I'm sorry. I'm sorry to interrupt you

11   for a second there.

12   It is moving faster than I expected. However, there

13   will be a lot of reading towards the end so I think we have a

14   couple of hours left.

15   THE COURT: All right. So you are likely to go the

16   remainder of the day?

17   MR. HOWARD: I think that is very likely.

18   THE COURT: All right. Fine.

19   Is there anything else that we should go over before

20   we take our own break?

21   MR. DRATEL: No, your Honor.

22   THE COURT: All right. We'll resume then --

23   MR. DRATEL: Oh, yes. Wait. I do, your Honor. Just

24   one thing. Sorry.

25   The testimony of Mr. Yum, we would object to it as

1   expert testimony without proper notice. We'd also object to it

2   on the basis of hearsay and Crawford based on the fact that

3   60 percent of the work was done by someone who is not here as a

4   witness, and we don't have notes, we don't have anything, or

5   know what was done with respect to these processes, which are

6   very technical. So on that ground I move to strike his

7   testimony.

8   THE COURT: All right. Mr. Howard.

9   I'm sorry, Mr. Turner.

10   MR. TURNER: Your Honor, so we don't think it is

11   expert testimony. It does not require some sort of specialized

12   opinion. As the agent himself explained, this is akin to

13   looking at a bunch of bank records from -- you know, controlled

14   by one entity or coming from one place and seeing if there are

15   transfers going to another place, another account. It was done

16   in an automated way, but it's still in essence just looking at

17   basically the equivalent of bank records in the bitcoin

18   context. It doesn't require expert knowledge. So we don't

19   think it is expert testimony.

20   And in terms of Crawford, the agent testified, he was

21   personally involved in the analysis and even writing the code

22   that was referred to. There is no hearsay issue.

23   THE COURT: I think it was a Crawford issue that he

24   was raising.

25   MR. DRATEL: Yes. That is right.

F1tdulb6   Shaw – direct

1   THE COURT: Not hearsay.

2   MR. DRATEL: Well, the hearsay is the Crawford part.

3   It is a complication issue because, essentially, the work of

4   someone else is just simply being put in through this witness.

5   And, also, he is an expert in the sense that he acknowledged

6   that he couldn't have done it in the time that it would need to

7   be done. Besides, he is a computer consultant for this very

8   purpose; it is not something they assigned to a paralegal or

9   they did themselves. This was farmed out for a reason.

10   THE COURT: Well, this witness was an agent on the

11   case who has extensive firsthand knowledge of the materials

12   with which he was working. And expert testimony can be both

13   opinions or specialized knowledge. But I agree with Mr. Turner

14   that while there are no opinions that he offered, he offered

15   fact evidence. It certainly seems to be precisely the kind of

16   work that he would have done had he been at the agency still.

17   And in terms of there being a confrontation issue, and

18   then implicitly through that -- I now understand you,

19   Mr. Turner -- a hearsay issue, I don't find that that has any

20   traction. The kind of work that he was doing is the kind of

21   work that's typically done, often done with others, and there

22   was nothing that he testified about that indicates that the

23   other person had done something uniquely on his own in which he

24   had no substantive involvement. The only issue was the actual

25   drafting of some of the code, but he had been involved in the

1   logic. So the application is denied. The motion to strike is

2   denied.

3   MR. DRATEL: There is one other element, your Honor,

4   which is the python programs. He used programs in the sense

5   of -- you know, I don't care if they are off the shelf or not,

6   but there is a hearsay problem and a confrontation problem.

7   THE COURT: I disagree with that. As we also heard,

8   that particular program is also on the defendant's laptop. But

9   in any event, the application is denied.

10   Is there anything else that we should do before we

11   take our own break?

12   MR. HOWARD: Not from the government's perspective.

13   MR. DRATEL: No, your Honor.

14   THE CLERK: All rise.

15   (Recess)

16   (Jury not present)

17   THE COURT: All right. Let's bring out the jury.

18   (Continued on next page)

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1   THE CLERK: All rise as the jury enters.

2   (Jury present)

3   THE COURT: Ladies and gentlemen, let's all be seated.

4   Mr. Howard.

5   MR. HOWARD: Thank you, Judge.

6   So, Mr. Evert, would you please put Government Exhibit

7   901 up again.

8   Q.   Just real briefly, Mr. Shaw, the date is March 26, 2013,

9   correct.

10   A.   Correct.

11   Q.   And so what does that mean with respect to this

12   authentication case?

13   A.   It that means this file was last modified on March 26,

14   2013, which means from that point forward this file was valid

15   for authentication.

16   Q.   Earlier you testified that an SSH authentication key is

17   used to authenticate access for an administrator into a

18   computer server without a password, correct?

19   A.   That is correct.

20   Q.   And so does this mean that as of March 26, 2013, a username

21   with Frosty with a computer named Frosty had what was

22   authorized to access the server provided they have a matching

23   key?

24   A.   That is correct.

25   Q.   Mr. Shaw, earlier we just briefly mentioned computer

F1tdulb6   Shaw - direct

1   databases. Could you please provide some more details about

2   what they are and how they work?

3   A. Sure. Computer databases are a great way to store

4   structured information. So by storing it in a nice clean way,

5   you are able to quickly retrieve data back from the database.

6   A good example might be a local mom-and-pop shop like

7   your florist would have information about their vendors,

8   different salespeople that they deal with, and traditionally

9   these shops would have a Rolodex with, you know, a card for

10   every single salesperson that they've ever dealt with over the

11   years and Rolodexes are organized by the salespeople's last

12   names. Each one of these cards would have, you know, like the

13   person's first name, last name, telephone number, an email

14   address, and the name of the company that they work for. By

15   storing information like that in a database, if it ever comes

16   to a time like, oh, I remember there was a salesperson John

17   from company XYZ but I can't -- I don't remember his last name,

18   if you had that data in a database you could easily ask the

19   database please give me all the salespeople from company XYZ

20   whose first name started with the letter J and you would get

21   your results back quickly.

22   Another benefit of databases, on that Rolodex card you

23   could also say all of our contracts are located in the filing

24   cabinet 2, drawer 3. So that way you could easily when you are

25   going through the Rolodex say, OK, for this company I need to

1   pull up some contracts. Go straight to the filing cabinet.

2   The benefit of databases is you can easily do those

3   types of links backwards and forwards to quickly retrieve data.

4   Q. So did you discover any computer databases on the two

5   servers that you analyzed?

6   A. Yes, I did.

7   Q. Did you examine the contents of those servers?

8   A. Yes, I did.

9   Q. And did you compare the databases you found on each of

10   those two servers?

11   A. Yes, I did.

12   Q. And what did you discover?

13   A. There was significant similarities between the structure of

14   the databases and significant overlap in the data within the

15   files that I reviewed.

16   Q. And what did the data in those databases appear to pertain

17   to?

18   A. It pertained to the function of the Silk Road Marketplace.

19   Q. Now, Mr. Shaw, could you please -- so what kinds of

20   information did the databases contain?

21   A. Some examples of what was in the database, there was a

22   table called "Transactions" that stored the transaction

23   information, so purchases of items from the marketplace.

24   Additionally, there was information on messages that were sent

25   between two individuals, two user accounts on the marketplace

1 itself.

2 Q. And this transactional and message information, was it

3 located on both servers you looked at?

4 A. Yes, it was.

5 Q. Would you please flip in your binder to what has been

6 marked for identification purposes as Government Exhibit 920A,

7 please.

8 A. OK.

9 Q. Do you recognize what this is?

10 A. Yes, I do.

11 Q. And what is it?

12 A. It's a technical description of the messages table for the

13 database.

14 Q. And this is where the messages in the databases were

15 stored?

16 A. Correct.

17 Q. Did you take this screenshot?

18 A. Yes, I did.

19   MR. HOWARD: The government offers Government Exhibit

20 920A.

21   MR. DRATEL: The same objection, your Honor.

22   THE COURT: All right. The objection is overruled.

23 920A is received.

24   (Government's Exhibit 920A received in evidence)

25 BY MR. HOWARD:

1   Q.   Would you please -- Mr. Shaw, could you please explain

2   what's located in the first column here?

3   A.   Sure. Kind of like the Rolodex where I said you had to

4   have the first name, last name of the company, what you see

5   here are the fields that are stored for each individual record

6   inside of the table. And some of the fields that are stored in

7   this information is data about who the message was sent to, who

8   the message was sent from, and then the subject and the body of

9   the message that was sent.

10   Q.   So this is the information that each record in the

11   messaging database contained?

12   A.   Yes. Each record would have this type of information in

13   it.

14   Q.   Was each message uniquely identified somehow in the

15   databases?

16   A.   Yes, they are.

17   Q.   How were they identified?

18   A.   They were uniquely identified by the index column here.

19   Q.   Would you please look in your binder. At the back there

20   should be something that's marked as Government Exhibit 960.

21   A.   Yes.

22   Q.   And what is this?

23   A.   It's a video that I put together to show some examples from

24   the private messages table.

25   Q.   Is it on a CD?

1   A. Yes, it is.

2   Q. How do you recognize this exhibit?

3   A. It has my initials on it.

4   MR. HOWARD: The government offers 960 for

5   demonstrative purposes.

6   THE COURT: 960?

7   MR. HOWARD: Yes.

8   MR. DRATEL: No objection for demonstrative purposes.

9   THE COURT: All right. Received for demonstrative

10   purposes.

11   (Government's Exhibits 960 received in evidence)

12   MR. HOWARD: My I approach, your Honor?

13   THE COURT: You may.

14   (Pause)

15   Q. Could you please describe what's going on in this video?

16   A. Sure. What we're looking at here are messages taken

17   straight from the messages table in the database. You'll

18   notice that the two fields here have some long strings -- and

19   in addition to the front field -- some long strings of

20   semi-random letters and data. So what you do is you resolve

21   that information by looking at the users table. So by doing

22   simple database joins, I was able to resolve that information.

23   Could you hit play, please.

24   Q. Actually, could you hold on one second.

25   So when you say that -- you called this random, are

1   these uniquely identified users in the users table?

2   A.   Yes, they are.

3   Q.   Please proceed.

4   A.   Could you pause, please.

5   So what you see here, I was able to resolve the

6   usernames, who sent the message and who the message was sent

7   to, and I also converted the date to a normal date that you and

8   I would understand. For example, you know, a message here was

9   sent from username "Pacco" to username "Red Bull." The

10   subject, I just typed in "subject." And the body of the

11   message was simply a question mark.

12   Hit play, please.

13   We will scroll through a few messages from the table.

14   (Indicating)

15   Could you hit pause, please.

16   One of the benefits of having the data stored in a

17   database is you could quickly retrieve messages sent from a

18   specific user to a specific user. So a very simple query to

19   ask of the database. In this instance what we're looking at

20   are messuages sent from the account Dread Pirate Roberts to the

21   account Inigo.

22   Could you hit play, please.

23   (Video playing)

24   I believe that concludes the video. Thank you.

25   Q.   So, Mr. Shaw, in the last example there, you showed an

1   example asking the database to return all of the messages

2   between -- from the Dread Pirate Roberts to Inigo, correct?

3   A. Correct.

4   Q. Can you ask other kinds of questions of the messages

5   database?

6   A. Yes, you can.

7   Q. Could you please flip into what is Government Exhibit 930

8   in your binder, please?

9   A. OK.

10 Q. Do you recognize what this is?

11 A. Yes, I do.

12 Q. What is this?

13 A. This is a message that was recovered from one of the

14 servers.

15 Q. Does the data in this exhibit accurately reflect

16 information about that message in the databases you reviewed?

17 A. Yes, it does.

18 Q. Did you participate in the creation of this exhibit?

19 A. Yes, I did.

20   MR. HOWARD: The government offers 930 into evidence.

21   MR. DRATEL: Just a minute, your Honor.

22   (Pause)

23   Objection to hearsay, your Honor.

24   THE COURT: All right.

25   MR. DRATEL: And Vayner.

1   THE COURT: All right. The objections are overruled,

2   and Government Exhibit 930 is received.

3   (Government's Exhibit 930 received in evidence)

4   MR. HOWARD: Could we zoom in on the top of the

5   message.

6   Q. So here we have a date and time of December 31, 2012, at

7   9:19:23, from Dread Pirate Roberts to NorCal420HookUp.

8   Subject: Account status.

9   Mr. Shaw, is that all information that you pulled from

10 the database?

11 A. This information all came from the database, correct.

12 Q. We are going to be looking at all the messages later.

13   Whenever we have this header information, was that

14 taken from the database?

15 A. Yes, it was.

16 Q. And how about the body part of the message, where was that

17 taken from?

18 A. That was stored in the database information.

19   MR. HOWARD: Can you zoom in on this.

20   "NorCal, My representative tells me he's having

21 trouble communicating with you, so I'll be handling your case

22 personally. I reviewed your correspondence so far and I'd like

23 to make a couple of points to clarify why you've lost your

24 selling privileges. From the Seller's Guide: "Do not create

25 listings that instruct customers to pay outside of escrow, or

1   are used for any purpose other than to list an item to be sold

2   for the listed price using the site checkout system. If you

3   instruct your buyers to pay you in any other way, or to contact

4   you off-site, your seller privileges WILL be revoked." You

5   created a listing called "Listing for "Other" transactions"

6   with a price of zero and proceeded to accept payment directly

7   to your account. Hopefully that clears up why your account was

8   suspended. Normally that would be the end of it and your only

9   option would be to sell your wares elsewhere or start over with

10 a new account. However, we've recently started a second chance

11 program where you can have your account back if you pay for the

12 commissions we lost and of course abide by the Seller's Guide

13 from now on. Regarding your claim that you don't owe this and

14 deserve your account back because Silk Road experienced

15 down-time, defacement, and is operated on the Tor network. This

16 is not the case. You do not have a right to the business I

17 generate for you through Silk Road. Your status as a vendor

18 here is a privileged that is contingent on you following the

19 rules, which you have not. You can either accept my second

20 chance and play by the rules from now on, start over with a new

21 account, or go elsewhere. Regarding your threats, they are

22 unprofessional and do not phase me one bit. I will overlook

23 them as an emotional response to an overwhelming situation and

24 AGAIN, give you a second chance to repair your relationship

25 with me and get your account in good standing. If I get any

1   response from you that isn't cordial and in compliance with

2   what I have told you you need to do to get your vendor

3   privileges back, your account will remain suspended

4   permanently. Hopefully we can put this behind us and have a

5   fresh start in 2013. -DPR"

6   So the private messages table reflected this is a

7   message sent by the user Dread Pirate Roberts, correct?

8   A.   Correct.

9   Q.   Now, Mr. Shaw, could you please -- now flip through your

10 binder and take a look at what's been marked for identification

11 purposes as Government Exhibits 931, 932, 933 and 935.

12 A.   OK.

13 Q.   Do you recognize what these exhibits are?

14 A.   Yes, I do.

15 Q.   Just like Government Exhibit 930, are these also private

16 messages that you located in the databases?

17 A.   Yes, they are.

18 Q.   Did you also participate in the creation of these exhibits?

19 A.   Yes, I did.

20 Q.   Have you confirmed that all of the information that is in

21 these exhibits truly and accurately reflect information from

22 the databases?

23 A.   Yes, I have.

24   MR. HOWARD: The government offers 931, 932, 933 and

25 935.

1   MR. DRATEL: The same objections, your Honor.

2   THE COURT: All right. The objections are overruled.

3   Those documents are received.

4   (Government's Exhibits 931, 932, 933 and 935 received

5   in evidence)

6   MR. HOWARD: Please publish 931, please.

7   Q. It's dated February 25, 2013, from Dread Pirate Roberts to

8   SweFarmacy. Subject: Withdrawals.

9   "SweFarmaci, what happened!!!

10   "I help you out and repay me by exploiting a bug in my

11   system? That's not cool man, you should have told me about it.

12   I want to give you a chance to do the right thing and put the

13   money back. If you don't, I'll get your mailing address from

14   one of the two vendors who your ordered from from your laksam

15   account and hunt you down, understand? Don't think I don't have

16   people in Sweden.

17   "Doesn't matter, I know you'll do the right thing,

18   right?

19   "-DPR"

20   Would you please publish 932, Mr. Evert.

21   It is dated April 11, 2013, from Dread Pirate Roberts

22   to supercanna. Subject: Expurdue.

23   "Hi supercanna,

24   "Do you remember a user you may have worked with named

25   expurdue? He managed to exploit a hole in the site and ripped

1   me off for a good chunk of change. I am hoping you can help me

2   track him down and recover my funds. Let me know if you have

3   any info on him at all.

4   "Thanks,

5   "DPR."

6   Mr. Evert, would you please publish Government Exhibit

7   933. The message is dated July 12, 2013, from Dread Pirate

8   Roberts to gold. Subject: Money exchange.

9   "Hey, if you have a problem you should come to me

10 instead of posting bad numbers on the forum. It's really not

11 cool and you should take them down and apologize. Silk Road

12 isn't some bureaucracy. I consider us business partners. Yes I

13 made a mistake and the message I had intended for you and the

14 other vendors to read giving you a heads up about the changes

15 was not delivered, that was my fault. I apologized for that

16 publicly and I apologize for it to you now.

17   "I'm surprised that commission increase on your $10k

18 listing has hurt your business so much, but I recognize that

19 running an exchange business has much tighter margins and

20 should therefore be treated differently. I had actually hoped

21 to help you specifically by making it possible for you to peg

22 your gold bullion listings the the price of gold, but it looks

23 like I've done more harm than good. I'm in the process of

24 developing a separate section of the site for money exchanges

25 and have a couple of questions for you if you don't mind.

1   "1) Are you willing to accept cash in the mail?

2   "2) What is the smallest denomination you could work

3   with? $5? $10?

4   "Silk Road was never set up to facilitate money

5   exchanges. I'm pleased that you've been able to run a good

6   business up to this point here, but until I get a system in

7   place that caters to your needs, it will be a challenge to fit

8   you in with the rest of the vendors. I don't want to say too

9   much without hearing your side of things first, so I'll stop

10   here and hopefully we can have a rational dialogue about this.

11   "DPR."

12   Mr. Evert, could you please publish Government Exhibit

13   935, please.

14   The first message is June 10, 2013, from shefoundme to

15   KingOfClubs. Subject: Group buy.

16   "Hi, I need a few of your highest quality IDs. I

17   notice several attributes you list: hologram UV scannable

18   raised lettering. Can you give me a rundown of the importance

19   of these attributes and what they are needed for? For example,

20   which are needed to pass airport security for a domestic

21   flight? Which are needed to get through being pulled over by a

22   cop? Are any of your IDs suitable for this purpose or are they

23   useful when scrutinized superficially? However you respond, I

24   would like about half a dozen of your best USA IDs and one of

25   the best from each of the international locations (Australia,

F1tdulb6   Shaw - direct

1   UK, Canada). Thank you for your assistance, I'll be checking

2   for a reply daily."

3   June 20, 2013, from KingOfClubs to shefoundme.

4   Subject: Group buy.

5   "If you are using them for those purposes, I would go

6   for the cards with all the features" -- Sorry, this is June 10,

7   2013. I think I misread the dates.

8   "If you are using them for those purposes I would go

9   for the cards with all the features, are you interested in any

10 specific states/provinces? Please narrow it down a bit for me

11 as I offer a lot of different cards, thanks."

12   June 10, 2013, at 20:53, from shefoundme to

13 KingOfClubs. Subject: Group buy.

14   "You have Illinois, South Carolina, New Jersey,

15 Florida, and Colorado listed as having

16 (Holograms+UV+Scannable), so I'd like one of each of these.

17 Then I'd like the New South Wales ID and the UK ID. For Canada,

18 you have: 1. Quebec Driver's License (Scannable Magstripe1,2,3)

19 2. Alberta Driver's License (Holo, Raised LTR, Scans) 3.

20 Ontario Driver's License (Raised Lettering, Scans) I guess

21 Alberta is better than Ontario because it has Holo. Is there a

22 difference between "Scans" and "Scannable Magstripe1,2,3"? If

23 there isn't, then I'd like the Alberta ID as well. You also

24 have the following listing: New Texas Drivers License(Raised

25 LTR, Holo, Scans) This is your only US ID with "Raised LTR",

1   but it doesn't have "UV". Can you comment on it's quality

2   compared to the US IDs listed above? Can you comment on the

3   suitability of using any of these IDs to board a domestic USA

4   flight? Can you please comment on what the various attributes

5   mean? For example, does "UV" mean if it is held under a UV

6   light, then some pattern appears that makes it look legit? If

7   it doesn't have "UV" does that mean if it is held under UV

8   light it will be exposed as a fake? In general, how much

9   scrutiny can these cards hold up against? Sorry for all of the

10   questions, but I hope you can spare a moment to inform me."

11   It continues here on the next page.

12   June 10, 2013, at 10:12 p.m., from KingOfClubs to

13   shefoundme. Subject: Group buy.

14   "Alberta doesn't have a magnetic stripe, it has a 2d

15   barcode on the back that is scannable. I provide UV on my DL's

16   for +$50 US if its not included in the listing, the New TX DL

17   is very good and has worked great for my past buyers. I can't

18   say for sure as no past buyer has told me if it has/has not

19   worked for this purpose. If you choose UV (which I suggest),

20   the same UV features that are on the real card will be on yours

21   as well. They can hold up against a high amount of scrutiny, if

22   you have any other questions let me know, Regards."

23   6/11/2013 at 2:17 a.m., from shefoundme to

24   KingOfClubs. Subject: Group buy.

25   "Ok, how much for the following: California, New York,

F1tdulb6   Shaw - direct

1   Texas, Florida, Colorado, South Carolina, UK, New South Wales,

2   Alberta. All newest and at the highest quality and most

3   security features you can do."

4   Mr. Evert, can you put this on one side of the screen,

5   please.

6   Could you publish -- put that on the left side,

7   please. That's fine. On the top is fine.

8   Can you publish Government Exhibit 402 on the bottom,

9   please, which has already been admitted into evidence.

10   Mr. Shaw, do you see the picture on the bottom?

11   A. Yes, I do.

12   Q. Have you seen this picture before?

13   A. Yes, I have.

14   Q. And how do the photographs, the nine IDs depicted in 402,

15   compare to the jurisdictions in the private messages?

16   A. They are a match.

17   MR. HOWARD: Mr. Evert, can you go back to the

18   message, please.

19   June 11, 2013, at 2:26 p.m., from shefoundme to

20   KingOfClubs. Subject: Group buy.

21   "Also, I'd like them to have a motorcycle designation

22   if possible."

23   6/11/2013, at 2:48 p.m., to KingOfClubs, from

24   shefoundme:

25   "I can add the motorcycle designation no problem, I

F1tdulb6   Shaw - direct

1   can do all those for $1650 US total. If you want me to put up

2   a custom listing for you let me know. Regards."

3   Then on June 11, 2013, at 3:06 p.m., shefoundme to

4   KingOfClubs: "I'm ready to buy, just send me the link to the

5   custom listing. I'd like them processed, shipped and delivered

6   asap. If you need to tack on a little extra for that, please

7   do."

8   6/12/2013, at 3:49 p.m., from KingOfClubs to

9   shefoundme:

10   "Custom for S" and then there is a URL there that

11 includes "silkroadvb5piz3r.onion/silkroad" and more text.

12   "As soon as you purchase the listing and send the ID

13 forms and pics i'll get started asap. Regards."

14   Then on June 12th at 10:01 p.m., from shefoundme to

15 KingOfClubs:

16   "Thank you kindly. There was a delay and I won't have

17 the address for another couple of days it looks like. Sorry

18 about that. I'll go ahead and buy the listing and then send you

19 all the info soon. I just put 'address in pm' in the address

20 box, so I'll message it to you along with everything else."

21   (Continued on next page)

22

23

24

25

1   Q.   6/12/2013 from KingOfClubs to shefoundme at 11:05 p.m.

2   Okay sounds good, looking forward to doing business with you,

3   Regards.

4   6/16, 11:36 a.m. from shefoundme to KingOfClubs:

5   "Sorry for the continued delay. I am try to arrange an address

6   to have the order sent to. To better help me plan, how long

7   from when I give you the information for the IDs (name, DOB,

8   picture, etc) until you are ready to ship?"

9   6/17/2013, 8:32 p.m. from shefoundme to KingOfClubs:

10   "I've sent along the info for my order to

11   kingofclubs@tormail.org from shefoundme@tormail.org. I used

12   that so I could attach the photos, but I'd like to continue

13   communicating here please."

14   6/18/2013, 3:41 a.m. from KingOfClubs to shefoundme:

15   "Okay sounds good, starting on it asap. Regards."

16   6/21/2013 at 2:57 p.m. from shefoundme to KingOfClubs:

17   'Begin PGP message," and I will not try to read that part of

18   it.

19   6/22/2013 at 12:26 a.m. from KingOfClubs to

20   shefoundme: "Okay we'll send there. Providing sample picks in

21   the next couple days, regards."

22   Then June 22nd, 2013 at 3:16 p.m. from shefoundme to

23   KingOfClubs: "Thanks can you confirm that I put Avenue and not

24   Street? Where will you send the samples? I think I'd rather

25   just have them sent than have pictures of them out on the web.

F1tgulb7   Shaw – direct

1   Can you do encrypted.rar over tormail as I did? That would be

2   acceptable I think."

3   June 25, 2013, 2:35 a.m. from KingOfClubs to

4   shefoundme: "You put Avenue, I'll send the sample pics in a

5   couple days, if you provide your public key i'll encrypt it for

6   you, what's the password for the rar file you provided? I

7   can't find it. Regards."

8   Skip the next page, please.

9   June 25, 2013, 5:44 p.m. from KingOfClubs to

10   shefoundme: "Okay. Getting started asap. Regards."

11   June 28, 2013 at 3:29 a.m. from KingOfClubs to

12   shefoundme: "Done, sample pics."

13   Q.   There's number one, number two, number three number four

14   and under each of them there are two links provided, correct?

15   A.   Correct.

16   MR. HOWARD: I do not require that you finalize early

17   as you have less than ten transactions in your buyer history,

18   as soon as you finalize I'll send it out asap. Regards.

19   Let's go to the next page, Mr. Evert.

20   7/29/2013 at 11:13 a.m. from shefoundme to

21   KingOfClubs: "Okay I have finalized. Please let me know when

22   it has shipped and when to expect it."

23   7/1/2013 at 9:40 p.m. shefoundme to KingOfClubs: "Any

24   idea when this will ship out?"

25   7/1/2013 from KingOfClubs to shefoundme: "Sent, will

1   be arriving midnext week, regards."

2   7/11/2013, 6:42 p.m. from shefoundme to KingOfClubs:

3   "The order did not arrive in today's mail. When did it go

4   out."

5   7/12/2013, 1:52 a.m. from KingOfClubs to shefoundme:

6   "It went out over the weekend, should be arriving any day now.

7   Regards."

8   7/17/2013 at 2:38 p.m. from shefoundme to KingOfClubs:

9   "Week and-a-half and still nothing. I paid nearly $30 for

10 express shipping. Did you send it express? What is the

11 tracking #?"

12   KingOfClubs: "Tracking number EG014226242 CA, track

13 at USPS.com regards."

14   KingOfClubs: "Yes it was sent Express."

15   Shefoundme on 7/18: "Looks like it got stuck in

16 customs. The last step is "inbound out of customs" on the

17 10th. Have you ever had something seized or any of your

18 customers get in trouble?"

19   7/20/2013 from KingOfClubs: "Seizures rarely happen,

20 maybe twice in 2 years. You will not get in trouble for this

21 if it is seized, in the worst case scenario they may send a

22 letter to you saying they have it and that if you want to come

23 pick it up you can. DO NOT go pick it up, obviously, if this

24 happens, remember that anyone can send anyone anything. I can

25 get them redone for you but it will take about a week and I

1   would need to sent it to another address, interested?"

2   7/21 from shefoundme: "Let's give this a little more

3   time to see if they come through. If not I'll hit you up for

4   another batch. Thank you for your help."

5   Finally, 7/21 KingOfClubs: "Okay sounds good.

6   Regards."

7   Q. Mr. Shaw, could you please turn in your binder to what's

8   been marked as Government Exhibit 936.

9   A. Okay.

10   Q. Do you recognize what this is?

11   A. Yes, I do.

12   Q. And what is this?

13   A. It is a list of selected messages to and from the user

14   account Dread Pirate Roberts.

15   Q. And did you also participate in the preparation of this

16   exhibit?

17   A. Yes, I did.

18   Q. Did you confirm that all of the messages depicted in this

19   exhibit truly and accurately reflect information from the

20   databases located on the servers?

21   A. Yes, I did.

22   MR. HOWARD: The government offers Government

23   Exhibit 936.

24   MR. DRATEL: A number of hearsay *Vayner*, 403 previous

25   objections.

1   THE COURT: All right. Those objections are overruled

2   for the previous reasons and this exhibit is received.

3   MR. HOWARD: Mr. Evert, can you please publish 936 and

4   can I have a bottle of water, please.

5   Q. Mr. Shaw, can you please explain what is depicted here?

6   A. Sure. This is a compilation of messages sent to and from

7   the user account Dread Pirate Roberts with one exception that

8   we'll talk about in a minute. The way that it is laid out is

9   there is a column here that will tell you who the message is

10   from or who the message is sent to. And implied in all of

11   these, again with one exception, is the other participant is

12   the user account Dread Pirate Roberts.

13   MR. HOWARD: So Mr. Evert, could you zoom in on the

14   top two lines for a second.

15   Q. For example, the first row in the to from column it says

16   "from FriendlyChemist," what does that mean?

17   A. That means this message was sent from the account

18   FriendlyChemist to the account Dread Pirate Roberts.

19   Q. And on the next line it says "to FriendlyChemist." What

20   does that mean?

21   A. That means it was a message sent from the Dread Pirate

22   Roberts to the FriendlyChemist.

23   MR. HOWARD: Zoom out. Could we go forward to page

24   eight, please.

25   Q. So what is this message right here, can you zoom into that

1   location?

2   A.   This is the one exception I was referring to. This is

3   actually from a forum post posted to -- it was from a backup

4   copy from the web forum associated with the Silk Road

5   Marketplace so this was available for others to read. It was

6   not a one-to-one message.

7   Q.   And are there other messages that are marked in blue?

8   A.   There are other messages marked in blue, yes.

9   Q.   What do those indicate?

10   A.   Anything marked in blue indicates that it came from the

11   backup of the forum, the web forum; however, all of the other

12   messages are still one-to-one between the user account and the

13   Dread Pirate Roberts.

14   Q.   By one-to-one, do you mean private messages to and from

15   Dread Pirate Roberts?

16   A.   Yes, the forum supported private messages also.

17   Q.   Let's go to the first page, please.

18   March 13, 2013 from FriendlyChemist: "Can u please

19   get dread pirate roberts to message me RIGHT away ? its very

20   serious... a matter of life and death. also has to do with the

21   identities of a dozen top vendors and thousands of silk road

22   customers its very important so please get him me right away. i

23   will not talk to anyone but dread pirate roberts so please do

24   not ask me what it is conserning."

25   From Dread Pirate Roberts to FriendlyChemist,

1   March 14: "What can I do for you."

2   March 14, 2013 from FriendlyChemist to Dread Pirate

3   Roberts: "What is going on? when are u payin lucydrop? i have

4   been waiting and waiting and he keeps saying hes waitin for u

5   to pay u dont know me but i am lucydrops supplier. the only

6   reason i lent lucydrop so much product is bcuz he showed me the

7   chat logs of u and him talking and how u made him the #1 seller

8   on silkroad. i lent him 900k of product and he paid me 200k and

9   then started avoiding me. i see u and him still have listings

10   up when i kno for a fact he does not have ne product. why are u

11   guys scamming people for there hard earned money? i stopped by

12   lucydrops house and he doesnt live there ne more and his phone

13   goes straight to voicemail but i kno he has been on sr.. and he

14   says wait for u what is the deal? where is my money? why is

15   lucydrop still selling when i kno for fact he has no product

16   because i supplyd him im freaking out here! that was not my

17   money! im getting scared. my wife said she saw people at my

18   kids school and im getting really worried i put a keylogger on

19   lucydrops computer when he left the room one day when i was

20   their so i could see what he was doing and i see he has been

21   selling still when i kno he doesnt have product. are u guys

22   pulling a scam? why!? i also have the indentities of 9 top

23   vendors and 15 smaller vendors and thousands of customers of

24   lucydrops. i dont want any trouble but i want my money! if u

25   havnt paid lucydrop drop pay him! if u have pay him then tell

F1tgulb7   Shaw - direct

1   him to pay me! im scared for my family! if u dont believe me

2   here is lucy password info login lucydrop passyworld lucedad

3   withdraw password lucedadhi5. i will not do anything tilll u

4   message me and tell me whats going on. please get him to pay me

5   asap or pay him asap if u havnt! this is my life here and im

6   scared for my family bcuz of the money i owe"

7   From Dread Pirate Roberts to FriendlyChemist: "I'm

8   really sorry for your situation. I've never had such a

9   conversation with Lucydrop. He/she must have made it up to

10   trick you. We have no special deal whatsoever."

11   From FriendlyChemist to Dread Pirate Roberts: "I find

12   it verry hard to believe. he showed the chat loggs talking to u

13   about u making him number 1 seller and being his partner on the

14   product i gave him. i would not have give him that much product

15   otherwise- especially because u made him the 1 seller please

16   dont screw me like this! my life is in danger because of this

17   money i owe! i also kno about the other vendor accounts his

18   friends are using. i have access to those customer lists too

19   from when lucydrop was dropshipping for them im not this kind

20   of person but the only card i hav left to play is dropping 2

21   dozen vendor identities and thousands of customer details on

22   the web and the forums. what do u and lucydrop think will

23   happen if thousands of usernames, ordr amounts, addresses get

24   leaked? all those people will leave sr and be scared to use it

25   again.. those vendors will all be busted and all there

1   customers will be exposed too and never go back to sr i dont

2   want to do that! i just want my money for my product! my life

3   is in danger and maybe my family. the people i borrowed that

4   from are not regular people!! i cant believe i was so stupid

5   and trustng! jus get lucydrop to pay me my money asap or if u

6   havent paid him yet then pay so he pays me the money he owes!

7   please! im freaking out here!"

8   March 15, 2013 from Dread Pirate Roberts to

9   FriendlyChemist: "I will get in touch with Lucydrop and get

10 back to you. Send me all the information you've harvested so I

11 can verify it."

12   From Dread Pirate Roberts to Lucydrop, subject

13 FriendlyChemist: "Hi Lucydrop. I've been contacted by a

14 member named FriendlyChemist. He claims to know you and have

15 done business with you in real life. He is making wild

16 accusation and threats against you me and other members of the

17 community. If indeed you know him, could you please provide me

18 with his name and address. I'd like to stop him in his tracks

19 by revealing that I know who he is and will retaliate if he

20 does anything stupid. Any other info you can provide is also

21 welcome. Thanks and sorry for the trouble. DPR. PS-please

22 don't contact him if possible, I'd like to handle it myself."

23   From FriendlyChemist to Dread Pirate Roberts: "I

24 didnt have to harvest anything - lucydrop kept a log of every

25 single transaction he made on silkroad like a idiot there r

1 thousands and thousands of orders there are over 20 vendor

2 identities from when he did biz with them - some with phone

3 numbers to - and over 5 thousand customer identities he also

4 ran more then 1 account on here nd seems to be still vending on

5 those accts too and did evrything from 1 computers so i have

6 all theyre info too u alrdy kno that i have access to his acct

7 and u can see most of his order r not encrypt so i dont kno why

8 u are asking for me to send all the info to u now. unless u

9 want to warn all those people so you and lucy dont have to pay

10 me his username - lucydrop his pw - lucedad his wd pw -

11 lucedadhi5 u say u are not working wit him but u still havn

12 closed his acct when u kno he is scamming but i will give u a

13 address to some customers and u can see he kept logs the whole

14 time. Here are some of his very first sales when he was

15 sending 3tab samples when he first started vending. u can

16 cantact them and see it is true. 3tabs Elwin B, Wellington New

17 Zealand three tabs, Michael S; Beverly Hill, Happy Valley, Hong

18 Kong six tabs; Mayan R Tel-Aviv 63457, Israel, six tabs, Amir

19 N; Technion 32000, Haifa Israel three tabs; Mr. N JB, NS W-2

20 234 Australia, three tabs, Abraham S."

21   And let's go to the next message: Zoom in on the

22 bottom.

23   "And the log goes like that up til today every day. nd

24 that it just 1 of his accts.. he has 3 total of his own he use

25 for different thing But im sure u kno this. or else why u let

1   that accunt stay open. I dont want to do anything with this

2   and i wont i just want my money! i am scared for my life and

3   you and him are not giving me answer. maybe if i post all the

4   vendor identity publicly and nobody sell on silkroad lucydrop

5   will have no more sales to scam ppl on his other account. i

6   just want what is owe to me and i will go away! i dont kno why

7   you ppl scam like this! ppl work hard for there money and u are

8   playing with ppl lives! I will wait ur reply from lucydrop -

9   but i dont kno how much longer i can wait.. how can i explain

10   to these ppl i dont have there money when i said i will have it

11   a certain day and now im late? these are not normal ppl and

12   they are getting angry with me Jsut get lucydrop to resolve

13   this, or pay him so he can pay me! i did a favor and this is

14   not fair to play with my life like this!"

15   From Dread Pirate Roberts to FriendlyChemist: "I'll

16   let you know when I hear from Lucydrop."

17   From FriendlyChemist to Dread Pirate Roberts: "When

18   will that be? i dont think u guys understand how serious this

19   is have u not payed lucydrop the 700k he is supposed to give me

20   yet? these people i borrowed from have been asking for me to

21   meet them and said they dont want to have to come and find me

22   im scared and u dont seem to even care that u guys are scamming

23   me and putting me life in danger! do i need to release some of

24   list so u take it more serious? i just want what is owed to me!

25   when will u guys make it rite?"

1   March 16, 2013, forum post by RealLucyDrop, title

2   "IMPORTANT, please post this thread in the rumor mill - I am

3   the RealLucyDrop. I can't post in rumormill because I don't

4   have 50 posts. Please post this thread in rumormill for me DO

5   NOT BUY FROM LUCYDROP ON SR I can't talk about specifics for

6   security reasons, but i was in jail for more than 2 months but

7   less than 7. I got released very recently. LucyDrop on SilkRoad

8   is NOT ME. DO NOT BUY FROM THAT ACCOUNT. My partner completely

9   fucked me over. I went to our spot.. there is nothing there and

10   he wont answer my phone calls. He took the work computer and

11   everything else. He took my entire savings with him that was

12   being used to keep supply up. He took my entire life. Somebody

13   PLEASE get in contact with DPR or Vendor Support and have the

14   account shut down immediately and freeze all the funds in the

15   account. How can I contact DPR? I can't find a link to message

16   him. I can prove to him that I am the real lucydrop as I do not

17   have access to my pgp or any of my logins. If you ordered from

18   me in the past (namely a couple of top vendors, i can give you

19   details and you can verify/vouch that I am indeed the real

20   LucyDrop) Do not trust anything that is said from that LucyDrop

21   account! Do not send ANY FUNDS. Do NOT FINALIZE ANYTHING."

22   "Somebody please get DPR to see this thread. Someone

23   please post this in Rumor mill. My entire life was taken from

24   me and I don't know what to do."

25   March 16, 2013 from Dread Pirate Roberts to

F1tgulb7   Shaw – direct

1 RealLucyDrop: "Hi there. How did the new person gain access

2 to your account"?

3   From RealLucyDrop to Dread Pirate Roberts: "It's not

4 a new person who took over the account. It was my partner in

5 real life that I started Lucydrop with. I was the one that

6 actually handled the Lucydrop account until I got arrested. I

7 was picked up on previous drug offense warrants and spent some

8 time in jail. My partner took absolutely everything from me in

9 that time. He took all the work computers, the bitcoin

10 wallets, all the work product and nearly my entire life savings

11 and scammed a bunch of people in the process."

12   "FriendlyChemist was our middleman to one of our LSD

13 distributers. I called him also after I got released and he is

14 demanding I pay him for some deal he had with my partner when I

15 was in jail and telling me he will do something very stupid if

16 he doesn't get paid. How do you know FriendlyChemist?"

17   March 17, 2013 from Dread Pirate Roberts to

18 RealLucyDrop: "I'm so glad you know him! He has gathered the

19 personal information of many of the customers who worked with

20 LucyDrop (not sure if you were in control of the account at the

21 time or not) and also some of the vendors on SR. Now he's

22 trying to blackmail me by saying he will release all of this

23 info. If this happened it will be terrible. I need his real

24 world identity so I can threaten him with violence if he were

25 to release any names (name, address, anything you have.) It

F1tgulb7   Shaw – direct

1   sound like he's in a tough spot that your former partner put

2   him in, but I can't get involved and I can't let him release

3   those IDs. Thank you for any help you can provide."

4   From RealLucyDrop to Dread Pirate Roberts: "I don't

5   know how I feel about that solution. Remember that he also

6   knows my real world identity and has evidence on me as well.

7   I'm sure you are well aware of what would happen to me if my

8   information was to be released. If he had access to that

9   computer there is a lot more damaging stuff on there than just

10   the identities of a bunch of vendors and a bunch of customers

11   of mine. There is enough on that computer to put me away for a

12   very long time. He's acting erratic now (understandably, given

13   his situation), but I will set up a meeting with him and try to

14   reason with him. It is also in my best interest that he does

15   not release anything as well as in the best interest of this

16   movement we are a part of..putting power in the peoples hands.

17   I fucking hate what money does to people. I am in contact with

18   him, and I told him that I am talking to you and I'm going to

19   have a meeting with him and try to resolve this problem of

20   ours."

21   March 18, 2013, from Dread Pirate Roberts to

22   RealLucyDrop: "Okay. Lucy, do me proud." Emoticon.

23   From RealLucyDrop to Dread Pirate Roberts: "Will do.

24   Obviously I won't ask you what timezone you are in, but can you

25   give me certain hours that are the best to reach you at? The

F1tgulb7   Shaw - direct

1   delay in messages back and forth make it hard to communicate

2   effectively. I'm in the Pacific time zone.. Can you tell me

3   what time in PST are the best times to reach you at? I don't

4   mind having to wake up in the middle of the night to hop on the

5   forums so just tell me whatever works best for you. I will be

6   meeting him today in the morning."

7   From Dread Pirate Roberts to RealLucyDrop: "I will

8   check in as much as possible. Let me know if you need

9   anything."

10   March 19, 2013 from RealLucyDrop to Dread Pirate

11   Roberts: "I went to the meeting with him and he is extremely

12   frightened. He told me who he owes money to and I understand

13   his concern for his safety, because they are not people you

14   want to owe money to. He is freaking out and truly believes

15   that his life and his families life is in serious danger. He

16   thinks that you don't take him seriously and said he was

17   planning on releasing part of the information to show he is

18   serious. I convinced him not to and reassured him that things

19   would be okay. If that information gets leaked and those

20   vendors get busted, I would get busted too. I tried to not

21   show him that I was too concerned with his threats but I'm not

22   sure how to deal with him. He said he has been doing his

23   research and he says he has discovered the flaw with SR that

24   the buyers have never thought about (I'm assuming he is

25   referring to the fact the vendors all have peoples addresses

1   and you can use it against SR or the buyers themselves to

2   extort money or what have you). He also kept talking about the

3   shitstorm that would be caused by that much information being

4   leaked and media/police picking up on it and starting a mass

5   panic. He said if we don't pay him that he will release the

6   information, and if that does not work he will go straight to

7   the police with all the information and get into the witness

8   protection program. The people he borrowed the product from

9   are a big criminal organization in Canada (Hells Angels-not

10   sure if you are familiar with them) and the police have been

11   known to treat witnesses against them very well."

12   "This is saddening because this guy is really not like

13   this, but I guess with the threat to his and his families life

14   he is under extreme stress and acting out of character. I

15   calmed him down a bit and told him I would find a way to help

16   him. That was somewhat of a lie on my part because I really

17   don't know how I can help him but I wanted to reassure him so

18   he didn't do anything drastic in the meantime until we find a

19   solution."

20   "I asked him that you would never fully trust him to

21   not use the information against him even if you got paid and he

22   said the following. I'm recalling this all from memory so

23   excuse me if it's not completely accurate."

24   "He said regardless of anything, he needs to pay the

25   people asap or he's he is in grave danger. He offered me a

1   deal because as you know selling on SR was my income and he was

2   my connection for LSD. He said he wants to be paid and that he

3   would then give me product at his cost, so I could pay you back

4   by selling and giving you the percentage of what he would

5   normally put on top when he was selling it to me. He was

6   putting 50 percent on top of his cost when he gave it to me, so

7   he suggested I start vending again and you take 50 percent of

8   all sales. That way you would be paid back in full, I would be

9   able to sell again on SR and that people he borrowed the

10   product from would be paid back and he would be safe. I said

11   that was a bad deal because you still have all the vendors

12   information and customers information. He said that he would

13   be willing to give you his identity, talk to someone on the

14   phone to verify, or give any other identifying information that

15   could be confirmed as collateral so he would never be able to

16   use that information again, and that you would feel confident

17   that the information would never be exposed."

18   "I don't know what you think, but that is what he said

19   to me. What should I say to him."

20   March 20, 2013 from RealLucyDrop to Dread Pirate

21   Roberts. The subject this guy is calling me nonstop: "Can you

22   tell me what to tell him, please? I've been stalling him and

23   told him I would get back to him ASAP. Can you just tell me

24   what to tell him so I can make arrangements protect myself in

25   this situation also if he goes through with this threat, I will

1   need to protect myself."

2   From Dread Pirate Roberts to RealLucyDrop: "You know

3   his real-world identity don't you? There is no way I will be

4   handing cash over to a person who is threatening me and my

5   community. Give me his ID so I can have some leverage in

6   dealing with them. You said you don't know what to do now, so

7   let me take over and give me all the info you have so I have

8   the best chance at defusing this situation."

9   From RealLucyDrop to Dread Pirate Roberts: "Yes, I do

10   know his identity, but you threatening him back will not help

11   this situation. He is deathly afraid of the people he owes

12   money to and they already know where he lives and where his

13   kids go to school etc. That will just expedite him going to

14   the police, thus the information being given to them including

15   my identity because they police will want all the information

16   he has if they will protect him and put him in witness

17   protection. Obviously you don't want to be blackmailed and let

18   some fuck take money but this situation is extremely sensitive

19   and I'm getting increasingly worried about my own safety

20   regarding the police or my information being leaked too."

21   "If I can get some money together would you be willing

22   to help me pay him and then taking 50 percent off of each of my

23   sales to repay you what you have lent? I was the number one

24   vendor with three best selling items on SR so it would not take

25   long. That way I also get to keep my connection for LSD and be

1   able to keep vending. I can probably get 300K together or

2   maybe more if I try to borrow some money from friends. I just

3   don't see how you threatening him is going to help the

4   situation at all and will probably just make him go to the

5   police even faster/releasing the information faster since he

6   will know he will not be able to pay them off and will have no

7   choice but to go to the police after releasing the information

8   since he will be in serious trouble."

9   "Please try and check your messages more often,

10   because whenever I don't have anything to tell him he starts

11   acting more erratic since the people he owes are on him hard

12   about getting paid."

13   From Dread Pirate Roberts to RealLucyDrop: "Don't

14   bother messaging me again if the message doesn't contain his

15   personal information. I'm not fronting money to anyone and I

16   won't be blackmailed. I would also like the contact info/ID of

17   the other Lucydrop that ripped him off and of his suppliers if

18   possible. You don't know how to handle this situation, but I

19   do. Stop showing this guy compassion. He is threatening our

20   life/freedom and my livelyhood."

21   March 21, 2013 from RealLucyDrop to Dread Pirate

22   Roberts: "If you really think that you have a good idea to

23   deal with him, I will give you the information you want about

24   his identity. Please understand why I'm hesitant as it is my

25   freedom we're dealing with."

1   "I will have no income since he was my connection for

2   LSD. Are there any positions open on SR? Support or

3   otherwise? I could really use some sort of job as my partner

4   completely fucked me over."

5   "Let me know how to send the information to you..plain

6   text or you can give me a PGP key to use."

7   From Dread Pirate Roberts to FriendlyChemist re, Very

8   important: "Have your suppliers contact me here so I can work

9   out something with them. Do not tell them I owe you money.

10   That is not true and will only complicate matters. Tell them

11   the truth, the person who stole your money sold their product

12   on my site and that you are now blackmailing me to get them

13   their money. You should copy/paste this message to them."

14   March 21 from Dread Pirate Roberts to RealLucyDrop:

15   "Thank you for your understanding. Please encrypt the

16   information with the key below and send it to me here."

17   Go to the next page.

18   "Hate to even ask this but any job operation? I've

19   always been loyal to you and believe in the movement. I was

20   the number one vendor with the number one selling products so I

21   am I am very familiar with how things work..I just am in a bad

22   spot after my partner fucked me and could use any sort of

23   income while I get back on my feet."

24   March 21, 2013 from Dread Pirate Roberts to

25   RealLucyDrop: "Please send the exact address of FC. I might

1   be able to take you in as a part-time mod. I'll run it by the

2   staff."

3   March 24, 2013 from RealLucyDrop to Dread Pirate

4   Roberts: "That's not a problem. I will go out there in a

5   couple days and get the exact address for you. Did you consult

6   the staff about the part-time job."

7   March 25, 2013 from Dread Pirate Roberts to

8   RealLucyDrop: "Not yet. Is he still in contact with you?"

9   March 25, 2013 from redandwhite to Dread Pirate

10   Roberts subject FriendlyChemist: "I was asked to contact you.

11   We are the people FriendlyChemist owes money to. He tells us

12   that you owe him money and a long boring story about some of

13   this and some of that. As far as we are concerned-we gave him

14   the product. Where it went and how it does not matter. We

15   hold him and him only responsible for the missing

16   product/money. We don't care if you stole it from him/borrowed

17   it from him or anything. It was his responsibility to pay for

18   it. He asked me to contact you anyways. What would you like

19   to talk to us about?"

20   3/26/2013 from RealLucyDrop to Dread Pirate Roberts:

21   "He answers though sporadically...I have heard via the

22   grapevine that he is in contact with the people he owes money

23   to but he is refusing to meet up with them like they have told

24   him to."

25   March 26, 2013 from Dread Pirate Roberts to

F1tgulb7   Shaw – direct

1   redandwhite: "Sorry for the delayed response and thank you for

2   getting in touch. We've had some technical difficulties in the

3   past 24 hours I've had to deal with. Just to be clear, I do

4   not owe him any money but he has told me his situation and

5   wants my help. I'm not entirely sure what the best action to

6   take is, but I want to be in communication with you to see if

7   we can come to a conclusion that works for everyone."

8   "FriendlyChemist aside, we should talk about how we

9   can do business. Obviously you have access to illicit

10   substances in quantity and are having issues with bad

11   distributers. If you don't already sell here on Silk Road I'd

12   like you to consider becoming a vendor. Many people here

13   purchase in bulk as well as retail quantities. Being a vendor,

14   you'll have the protection that dealing anonymously in bitcoin

15   provides, and you'll have protection against people like

16   FriendlyChemist ripping you off because all the transactions

17   are conducted through my escrow. I encourage you to read the

18   Wiki and forum (links in the footer) and consider becoming a

19   vendor here."

20   "So if there is anything I can do as the admin here to

21   help you get involved in Silk Road, or anything I can do to

22   help with your situation with friendlychemist, please just let

23   me know. DPR."

24   March 26, 2013 from redandwhite to Dread Pirate

25   Roberts: "That is interesting. How much is it possible to

1   sell on here if we listed every product far cheaper than

2   everyone else? We have a majority hold over most of the

3   movement of products in western Canada, one of the main drug

4   ports in North America. I have researched your site and the

5   concept seems interesting to me (as long as it is as anonymous

6   as everyone makes it out t to be) We produce

7   LSD/nBome/Ketamine/MDMA/Meth/GHB and import cocaine and heroin

8   in massive bulk amounts. We have a lot of workers who run

9   their own sub distribution networks for the streets, but if it

10   is lucrative we are always looking to expand."

11   "In my partners eyes all they will see is that because

12   of online dealing we are out out 700k so I'm not sure they will

13   go for it. FriendlyChemist refuses to meet up with us because

14   of what he fears will happen. People are starting to suspect

15   that he will go to the police, which is not a problem because

16   he would never be able to give up anyone of importance since he

17   only has ever had contact with low level people in our group

18   and they always take precautions so that even if someone were

19   to turn informant, they would not be able to get any charges to

20   stick. It's a shame because he moved a fair amount of product.

21   If you can get FriendlyChemist to meet up with us, or pay us

22   his debt then I'm sure I would be able to get people in our

23   group to give this online side of the business a try. As it

24   stands right now, there are people looking for him and since he

25   has avoided our group, I'm not sure what will happen since he

1   owes us money and is avoiding us. I've looked around your

2   site, and the prices are absolutely absurd. I'm assuming most

3   people on here selling are three or four tiers before the

4   actual producers or distributers?"

5   From Dread Pirate Roberts to RealLucyDrop on March 27,

6   2013: "Why haven't you gotten the address yet. Bring me the

7   address and $1,000 in BTC is yours."

8   March 27, 2013 from Dread Pirate Roberts to read and

9   white re FriendlyChemist: "In my eyes FriendlyChemist is a

10   liability and I wouldn't mind if he was executed but then you'd

11   be out your 700K. I don't think he is going to come up with

12   the money because he seems very desperate. I'm not sure how

13   much you already know about the guy, but I have the following

14   info and am waiting on getting his address.

15   "Blake Krokoff off lives in an apartment near White

16   Rock Beach, age 34, City of White Rock, Province, British

17   Columbia, wife plus three kids. Let me know if it would be

18   helpful to have his full address.

19   "Let me know if it would be helpful to have his full

20   address. In those categories, I think you could be doing over

21    $1M in sales a week within a few months. It is hard to estimate

22   because it depends on how much market share you get and also

23   the site as a whole is constantly growing. You will need to

24   become very proficient at stealth shipping and packaging if you

25   aren't already. Think vacuum sealers and leaving no forensic

1   evidence on your packages. You will also want to ship from

2   multiple drop points so you can't be traced back via your

3   (fake) return address. If you go through with this, I would

4   contact some of the top vendors and hire them to consult you.

5   Ask the weed vendors because you won't be competing with them

6   and their product is smelly and looked for by USPS, so they

7   have to be on top of their game. I would also start out listing

8   smaller amounts so you can get the hang of it before putting up

9   a substantial inventory. You will also need to market yourself

10   on the forums a little bit at first, maybe send out some

11   samples to critics. That is one price of anonymity, no one

12   knows you, but if your customer service is good and your

13   product is good and cheap people will quickly catch on and you

14   won't have to do much hustling.

15   "Regarding prices, there are some costs here you don't

16   otherwise see. I take three to ten percent depending on the

17   sides of the transaction. If you hedge your escrow balance)

18   and you should (that can cost up to five percent per

19   transaction and then if you need to convert your bitcoins into

20   another currency there are fees associated with that, though

21   not that much. There are only occasional losses due to

22   packages lost in the mail. The rest of the markup is due I

23   think as you say to the fact that most vendors are pretty far

24   down the distribution chain.

25   "Regarding the safety and anonymity, we've been

1   operating for over two years now in the open as a high profile

2   target and are still going strong. If you take the necessary

3   precautions and use technology I think you can operate very

4   securely and efficiently here, maybe more so than some of your

5   current operations."

6   THE COURT: Mr. Howard, I think we're going to need to

7   stop there.

8   MR. HOWARD: Can I show one exhibit with this last

9   message and we can stop.

10   THE COURT: Yes.

11   MR. HOWARD: Can we go over to the last page, please,

12   the previous page. Can you zoom in where it starts Blake,

13   where the name is through the next line. Can you move that to

14   the top of the screen. Can you please publish Government

15   Exhibit 275E on the bottom of the screen, which has already

16   been admitted into evidence. It's a file that's been recovered

17   from the defendant's computer.

18   THE COURT: What are you turning us to?

19   MR. HOWARD: It's the log file.

20   THE COURT: 275D?

21   MR. HOWARD: 275. The E was a typo in my notes. 275

22   on the bottom, Mr. Evert.

23   Q. Mr. Shaw, does that information match?

24   A. Yes, it does.

25   MR. HOWARD: Could we go to the metadata on that file,

1   the 275, the last page and zoom in on the bottom left-hand

2   corner and give me the full top name.

3   "home/frosty/backup/reference/by me/ops.txt."

4   This would be a good time to stop.

5   THE COURT: Ladies and gentlemen, we are going to end

6   for the day. We're going to pick up on Monday, but I want to

7   let you know that if -- it's very likely that we're going to be

8   sitting on Friday next week so you should make sure -- we

9   haven't been sitting on Fridays so far, but I said that if

10   there was a possibility that you'd be in the midst of

11   deliberations, I would have you continue to sit on Friday.

12   This is from way back during jury selection. So just bear that

13   in mind.

14   We'll see how things progress and I'll try to give you

15   some updates, but I just wanted to give you some advance notice

16   so that you have your calendars appropriately organized.

17   Now, I want to remind you for this weekend, again,

18   you've heard an awful lot of evidence. There's more to come.

19   And you've been here for a while. So I know my voice is

20   probably becoming sort of -- it gets like a lull. But I really

21   do want to make sure that you folks know how important it is

22   that you don't talk to anybody, including each other about this

23   case. You avoid all media relating to this case and you don't

24   try to go off and start searching any of the websites that you

25   hear about. You hear about an awful lot. You're probably

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1   yourself on the computers a lot. You need to not engage in any

2   temptation to run a few searches yourself, don't do that all

3   right.

4   I hope you have a terrific weekend and we'll see you

5   Monday morning the usual time. We'll start at 9:30. Thank

6   you.

7   (Jury excused)

8   THE COURT: Sir, you may step down. You should be in

9   your chair at 9:30. Thank you.

10   THE WITNESS: Thanks.

11   (Witness temporarily excused)

12   (Continued on next page)

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1   (In open court; jury not present)

2   THE COURT: Let's all be seated, ladies and gentlemen.

3   It's Thursday afternoon. Give me a sense, Mr. Howard, so we

4   can figure out when the defense case is going to start, when

5   approximately you're going to end with this witness. And

6   mr. Dratel will have a sense as to how long he might take.

7   MR. HOWARD: This is the last lengthy portion ready

8   reading. I think there are another couple Tor chats. There's

9   not much more after this very long piece. I would guess an

10   hour and-a-half to two hours max.

11   THE COURT: So if we start anywhere in the vicinity of

12   9:30 on Monday, hope springs eternal, then that would be

13   11:30-ish.

14   MR. HOWARD: I think that's right. I think we're

15   definitely going to finish before lunch.

16   THE COURT: Then Mr. Dratel will have whatever cross

17   he's going to have. How much does the government have after

18   that in terms of stipulations or anything else that you'll need

19   to do, if anything?

20   MR. HOWARD: I think there's a very few things that

21   we'd want to read into the record.

22   THE COURT: Ten minutes, five minutes, 20 minutes.

23   MR. HOWARD: Five to ten minutes max.

24   THE COURT: Mr. Dratel and Ms. Lewis, we're likely to

25   get to your case then Monday after -- in fact, it sounds like

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1 we will get to your case Monday after lunch-ish. In that

2 regard, we'll need to talk about the logistics of when you're

3 going to give the notice if you're -- if Mr. Ulbricht is going

4 to testify. One of the options is if he's going to testify and

5 the other folks I realize are not going to be in town, then

6 obviously he could since he's sitting here, he can testify

7 then. That's one possibility.

8   But I think it would be fair to give the government

9 some notice of that at some point prior to that, but that's an

10 option in terms of getting your folks here. Otherwise, I don't

11 know how -- if your expert is local, let me hear from you,

12 Mr. Dratel.

13   MR. DRATEL: We'll coordinate so we'll be ready to go

14 at that point on Monday. I mean, if obviously we'll have as

15 many people here as we need to. People are booking their

16 travel. That's what we're trying to do.

17   THE COURT: When will you have an answer on whether

18 Mr. Ulbricht will testify?

19   MR. DRATEL: I don't know.

20   THE COURT: Is it possible over the weekend?

21   MR. DRATEL: It's possible, but I don't know. You

22 know, he gets the right to make that decision; even if he told

23 me today, he gets the right to change his mind.

24   THE COURT: I certainly understand that. It's also

25 the case that the Court is entitled to ensure that we have an

1   orderly trial and that he makes a decision in a reasonable

2   time. There are many judges who would have required it before

3   now. It's not my style to require for the defense that they

4   say it one way or the other for sure before the end of the

5   government's case. However, if you're leaning one way or the

6   other, then it's fair to get notice because he would be a

7   substantial witness to prepare for cross-examination for.

8   MR. DRATEL: I assume that they would be prepared for

9   him no matter what because this has been going on for a long

10   time. So I can't make him decide it before he is ready to

11   decide it.

12   THE COURT: What I'm saying is, first of all, and I'll

13   be clear to Mr. Ulbricht because I can see him and we see each

14   other all day long, and you need to decide by the end of the

15   government's case and convey that to Mr. Dratel in consultation

16   with Mr. Dratel and after -- when the government rests, at that

17   point, we're into the defense case and we need to know.

18   So, if you folks have decided that earlier, then I ask

19   you to notify me and the government that you have made a

20   determination one way or the other. If that occurs, tomorrow,

21   tonight, over the weekend, if you haven't, so be it. We'll

22   break at the end of the government's case and I'll ask you then

23   but it will also give me a sense in terms of timing, it will

24   give me a pretty much better sense than I have right now to how

25   long the case will last.

1   MR. DRATEL: I object for this reason. He has a right

2   to see -- he has a right to determine after the defense

3   witnesses testify whether he likes it or not, whether he thinks

4   he should testify.

5   THE COURT: You can look at the case law on that.

6   There's ample case law on precisely this issue. I'm sure

7   you're aware of it.

8   Now, let's talk about closings. It is my practice

9   always to go directly into closings. There will not be an

10   overnight if there's time left in the day unless there's not

11   enough file to get to a closing.

12   Let's take an example. If, for example, the defense

13   case is over by 11:00 a.m. on Tuesday or 2:00 p.m. on Tuesday,

14   you will do your closings on Tuesday. So you should prepare

15   for closings shortly thereafter. If it's Wednesday, it will be

16   Wednesday. If it's Thursday, it will be Thursday. If it's the

17   following week because the case is still going and we're not in

18   deliberations in which case I will not make the jury sit on

19   Friday, but just bear that in mind because sometimes people get

20   an overnight. You might, if we end at 3:00 one day or 3:30 and

21   it seems like a logical thing to do, but you may not.

22   Now, the last item I have is for jury instructions.

23   For jury instructions, we got through all but the last couple

24   and I've got some decisions to make and you folks have letters

25   that you were going to send me if you wanted to on any

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1   remaining issues.

2   I'll take those tomorrow any time during the day

3   tomorrow any additional last comments; otherwise, my intention

4   is to finalize them and to send you folks another draft and

5   we'll then talk about -- I'll go through with you on Monday

6   morning or I'll issue something written shortly thereafter

7   which gives you the results of my determinations, but I know

8   I'm waiting for a couple of things from Mr. Dratel in

9   particular.

10   MR. DRATEL: And also a defense theory which we will

11   have at the appropriate time.

12   THE COURT: Obviously, if you have an instruction to

13   add that corresponds with the evidence, but what we're going to

14   be doing, we'll need to get that, but I will instruct the jury

15   as soon as you rest because it's possible that if, for

16   instance -- I have to be prepared to. If, for instance, it's

17   3:00 in the afternoon, I want to play out the timing, and we're

18   not going to close because it's too late in the day to get you

19   both in, then I may give at least give some of the instructions

20   at the close of all evidence. So I want to make sure that I

21   have it if you want something built in early on.

22   MR. DRATEL: We would have that Monday. It's just

23   when the government rests.

24   THE COURT: Terrific.

25   MR. DRATEL: It's purely just not to have a defense

1   theory and then respond to while they still have their case.

2   THE COURT: That's fine. That's fine. And if there's

3   anything else that has gotten modified as we have gone along,

4   because of the evidence that comes in obviously, we said that

5   we would revisit that and we will.

6   Are there things which you folks would like to address

7   apart from that?

8   MR. TURNER: There are several, your Honor. First of

9   all, in terms of defense 3500 in the exhibits, we'd like to get

10   a sense -- we'd like to set a deadline for that. We have

11   consulted with defense counsel and defense counsel has told us

12   they will try to give us that information tomorrow. I would

13   just like for some date to be set on the record.

14   THE COURT: When is the last that you need it by given

15   your resources which are greater than the defense's?

16   MR. TURNER: Well, we would like it, since we're going

17   to start with the defense case on Monday, I think we'd like it

18   at least by Saturday morning, 48 hours.

19   THE COURT: Why don't we split these into two groups.

20   There are, as I understand it, I don't know if the composition

21   has changed, but there is the expert witness and then there are

22   the somewhere, half a dozen to seven or so character witnesses.

23   As I understand it, Ms. Lewis, those are the two

24   groups that you described yesterday?

25   MS. LEWIS: That's correct.

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1   THE COURT: Is it easier to get one set versus the

2   other at one point in time and let me get a sense from the

3   defense as to what you folks are thinking.

4   MR. DRATEL: 3500 we were planning on getting to the

5   government probably by tomorrow evening I think is viable.

6   Exhibits is a little different for a couple of reasons: One of

7   which is the government is still on its case. Everything we

8   turn over to the government becomes part of their case, so I'm

9   really not inclined to start giving them exhibits so that they

10   can then call another witness or do something else with it or

11   have this witness talk about it if it's something from there.

12   We'll give them the exhibits as soon as they rest and

13   they're not going to be voluminous. It's all stuff they're

14   familiar with. This is all stuff from the discovery for the

15   post part. If it's not, if it's stuff having to do with an

16   expert, we'll get that so that everybody has notice. We have

17   been getting exhibits every morning, every night.

18   THE COURT: On the 3500 material, Friday evening is

19   fine. And we'll just make it at any point in time on Friday

20   since the government said Saturday morning for the 3500

21   material.

22   MR. DRATEL: All right.

23   THE COURT: So get it to the government how ever

24   logistically you folks arrange that.

25   In terms of the exhibits, when you say "not

1   voluminous," again can you split them between the two groups?

2   Are these really for the expert or are they other? Are they

3   for the seven?

4   MR. DRATEL: I don't think the character/fact

5   witnesses have exhibits necessarily. Maybe one, maybe a couple

6   of things -- it's possible one or two pieces.

7   THE COURT: In terms of the expert, I take it that you

8   have to have given the proper disclosure in any event to the

9   government and that's all done.

10   MR. DRATEL: Yes. We have one expert that we're going

11 to disclose probably later tonight based on what happened

12 today.

13   MR. TURNER: On the expert, we're actually going to

14 move to preclude. We don't believe the notice is sufficient.

15   THE COURT: Preview for me, is it because you don't

16 think the notice is sufficiently detailed or for some other

17 reason?

18   MR. TURNER: Three reasons: We don't think that the

19 subject matters of the testimony requires specialized

20 knowledge, we don't think they're relevant to the case and in

21 any event, the expert disclosure does not even provide the

22 opinions that this expert is going to provide. It just lists

23 subject matters, very general topics of discussion and there's

24 very clear law it's not sufficient under Rule 16, so we

25 prepared a submission. We were going to file it with the Court

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1   shortly after we get back.

2   THE COURT: I'll wait to see it. And that will

3   increase the workload of the defense in terms of needing to

4   respond to it because I'll need to rule on that very quickly on

5   Monday morning. It will be an initial order of business at

6   9:00 a.m. So let me see when yours comes in. And if you can

7   confer with the defense as to timing on when they can respond

8   and recite that, that would be helpful. If you can't, then

9   Mr. Dratel, if you can let me, as soon as it's filed, have a

10   sense Tuesday the soonest you can get it.

11   MR. DRATEL: Yes.

12   THE COURT: Because I don't want to give you a

13   deadline --

14   MR. DRATEL: Understand. I understand.

15   THE COURT: But I'd like to be able to read both.

16   What's the topic of the expert?

17   MR. DRATEL: Bitcoin.And the other expert is the

18   Computers, these computer issues.

19   THE COURT: Let's deal with these as they come in. I

20   take the heads-up Mr. Turner now. Now, in terms of numbers

21   of -- in terms of exhibits, let's assume for the moment because

22   I want to work on the logistics as well and I just don't know

23   how any of this is going to come out: When is the time frame

24   that you need the exhibits by?

25   MR. TURNER: I think any expert witness we would need

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1   them sooner rather than later. The fact witnesses, the

2   character witnesses are less of a concern.

3   I would add this is extremely late for disclosure of

4   another expert witness so we would hope that that disclosure is

5   made very promptly.

6   THE COURT: Well, if it's coming out of today with

7   Mr. Yum in terms of his analysis, that's one thing and we'll

8   deal with it when we see what the notice is; and you folks, if

9   you've got an issue, you'll raise the issue and the defense

10   will respond.

11   MR. TURNER: I was speaking of the second expert, the

12   computer issues expert.

13   THE COURT: He said it was coming out of --

14   MR. DRATEL: I'm sorry. I may have misspoke. It is

15   coming out of a series of witnesses, some of whom testified I

16   think as late as yesterday, but it also has to do with some of

17   the limitations on cross that have occurred in the last couple

18   of days. So you say we have to call a witness, we'll call a

19   witness.

20   THE COURT: Well, I said we would take up the

21   application if you're going to call a witness. So if you need

22   to call a witness and you're going to attempt it, it doesn't

23   mean you get around the Rule 16 disclosure requirement. So

24   you'll work with the government, make your disclosures. If the

25   government has a problem with it, they'll raise it with me and

1   we'll take it from there, all right?

2   MR. DRATEL: Just so we're clear: Again, every day we

3   get new exhibits. It is not something that's out of the realm

4   of a trial. They're going to get something in sufficient time

5   to work with it much more time than we have had to work with

6   much of what they have done.

7   THE COURT: I hear your frustration and your point.

8   MR. DRATEL: Thank you.

9   THE COURT: And we'll take it one step at a time.

10   What I'd like to do right now is the 3500 material is going to

11   go over. Let me get a sense of what this expert is about. And

12   you folks talk about whether or not you can get some timing. I

13   mean, if plenty of time means you're not going to get the

14   exhibits to them before the fellow or woman -- I don't know who

15   it is -- testifies, the expert, that's one thing. That's one

16   set of issues. If it's going to be Sunday at midday, that's

17   something else. I just need to have a sense. Let me let you

18   think about it because it's Thursday evening, so rather than

19   imposing something, but if I don't hear from you folks

20   generally, then I'll make some decisions.

21   (Continued on next page)

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1   MR. DRATEL: Many of these things were denominated as

2   government exhibits in the first exhibit list that they pulled.

3   So this is no surprise. It is not.

4   THE COURT: If it is relatively straightforward to do

5   that, then perhaps it is not, you know -- for some of them at

6   least, you can have the government start working on some of

7   them.

8   MR. DRATEL: I don't want to keep coming back and then

9   some other way that the government then -- they made the

10   decision as to what they want to do. Then I want to make the

11   decision as to what we want to do and not have them

12   compromise --

13   THE COURT: The one thing I have to say is have you

14   tried a lot of case where the defense shows nothing until the

15   government rests?

16   MR. DRATEL: Sometimes, yes.

17   THE COURT: Sometimes. Not very often. It is a

18   rather -- it is not very often. Not in federal court. It's a

19   unique view as to what the defense can do.

20   Now, I am attempting to have as much patience as is, I

21   think, possible with this, but your view as to things is

22   sometimes beyond my comprehension.

23   MR. DRATEL: OK. I would just say the predominant

24   number of cases that I have been in, even when the defense puts

25   on a case, that the government doesn't get the kind of advance

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1 notice that the government is seeking here of any of this

2 material.

3   THE COURT: All right.

4   MR. DRATEL: Maybe 3500.

5   THE COURT: All right. We're adjourned. We'll pick

6 up on Monday morning at 9.

7   You folks, if you have lost track of what you owe me

8 in terms of jury instructions or anything else, make sure you

9 look at the transcript because I will hold you to it.

10   We're adjourned.

11   THE CLERK: All rise.

12   (Adjourned to 9 a.m., Monday, February 2, 2015)

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